

NO-A191 363

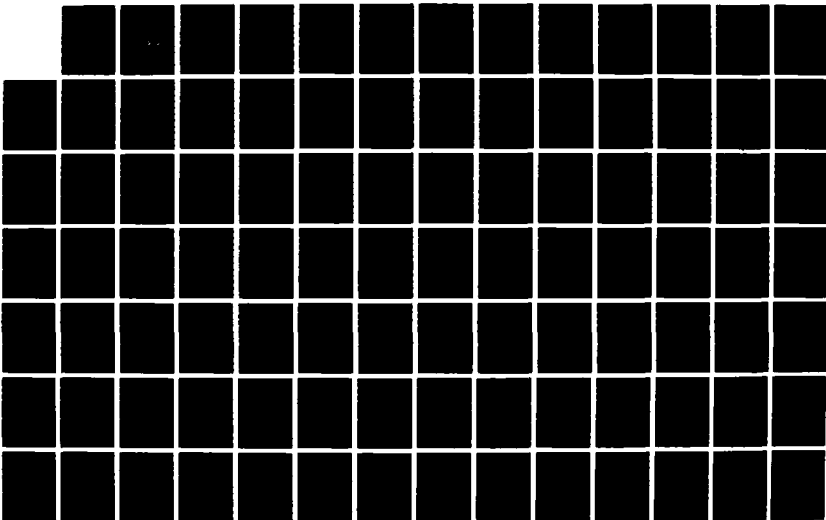
BIBLIOGRAPHY OF SOVIET LASER DEVELOPMENTS NUMBER 77 MAY
- JUNE 1985(U) DEFENSE INTELLIGENCE AGENCY WASHINGTON
DC DIRECTORATE FOR SCI.. SEP 86 DIA-DST-27002-005-06

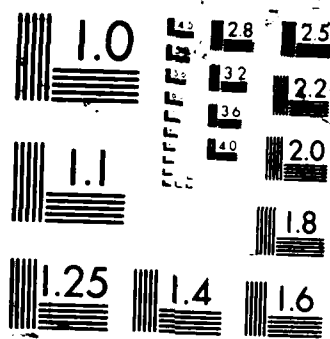
1/2

UNCLASSIFIED

F/G 9/3

NL





1

DTIC FILE COPY

Bibliography of Soviet Laser Developments

May-June 1985

AD-A191 363



Defense Intelligence Agency

DTIC
ELECTE
MAR 10 1988
S & D

DST-2700Z-005-86
September 1986

DISTRIBUTION STATEMENT A

Approved for public release
Distribution Unlimited

88 3 09 09 6



BIBLIOGRAPHY OF SOVIET LASER DEVELOPMENTS

No. 77

MAY - JUNE 1985

Date of Report

July 16, 1986

Accession For	
NTIS CRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	

Vice Director for Foreign Intelligence
Defense Intelligence Agency

This document was prepared for the Defense Intelligence Agency under an intragovernment agreement. It is intended to facilitate access of government researchers to Soviet laser literature.

Comments should be addressed to the Defense Intelligence Agency, Directorate for Scientific and Technical Intelligence, ATTN: DT-5A

Approved for public release; distribution unlimited

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER DST-2700Z-005-86	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) BIBLIOGRAPHY OF SOVIET LASER DEVELOPMENTS, No. 77 MAY - JUNE 1985		5. TYPE OF REPORT & PERIOD COVERED
7. AUTHOR(s)		6. PERFORMING ORG. REPORT NUMBER
9. PERFORMING ORGANIZATION NAME AND ADDRESS Defense Intelligence Agency Directorate for Scientific and Technical Intelligence		8. CONTRACT OR GRANT NUMBER(s)
11. CONTROLLING OFFICE NAME AND ADDRESS		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
12. REPORT DATE July 16, 1986		13. NUMBER OF PAGES 123
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		15. SECURITY CLASS. (of this report) UNCLASSIFIED
15a. DECLASSIFICATION/DOWNGRADING SCHEDULE		
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited		
17. Distribution Statement (of the abstract entered in Block 20, if different from report)		
18. Supplementary Notes		
19. KEY WORDS Solid State Lasers, Liquid Lasers, Gas Lasers, Chemical Lasers, Laser Components, Nonlinear Optics, Ultrashort Pulse Generation, Laser Crystal Growing, Free Electron Lasers, Laser Theory, Laser Biological Effects, Laser Communications, Laser Beam Propagation, Adaptive Optics, Laser Computer Technology, Holography, Laser Chemical Effects, Laser Parameters, Laser Measurement Applications, Laser-Excited Optical Effects, Laser Spectroscopy, Laser Beam-Target Interaction, Laser Plasma		
20. ABSTRACT This is the Soviet Laser Bibliography for May-June 1985, and is No. 77 in a continuing series on Soviet laser developments. The coverage includes basic research on solid state, liquid, gas, and chemical lasers; components; nonlinear optics; ultrashort pulse generation; crystal growing; theoretical aspects of advanced lasers; and general laser theory. Laser applications are listed under biological effects; communications systems; beam propagation; adaptive optics; computer technology; holography; laser- induced chemical reactions; measurement of laser parameters; laser measurement applications; laser-excited optical effects; laser spectroscopy; beam-target interaction; and plasma generation and diagnostics.		

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

INTRODUCTION

This bibliography has been compiled under an interagency agreement as a continuing effort to document current Soviet-bloc developments in the quantum electronics field. The period covered is May-June 1985, and includes all significant laser-related articles received by us in that interval. The bulk of the entries come from the approximately 30 periodicals which are known to publish the most significant findings in Soviet laser technology. Citations from the Soviet Reference Journals are also included. Laser items from the popular or semipopular press are generally omitted. All sources cited with no parenthetical notation are available at the Library of Congress. A parenthetical entry indicates the secondary source in which the citation was found as a bibliographic entry or abstract, but for which the original source is not currently available at the Library.

Since our computer is not now able to print between lines, superscripts and subscripts are indicated by (sup) and (sub).

We are now producing the entire bibliography on computer. To make our bibliography compatible with other data bases, we have converted the source abbreviations from our previous practice of those used in the Soviet Union to the letter codens generally used in our own government. Likewise, we have converted the affiliations designations from numbers to letter codens. The authors' affiliations are indicated in parentheses after the authors' names in the text. Empty parentheses indicate the affiliation was not given. A source abbreviations list, authors' affiliations list, and author index are included in the back of the bibliography.

SOVIET LASER BIBLIOGRAPHY, MAY - JUNE 1985

TABLE OF CONTENTS

I. BASIC RESEARCH

A. Solid State Lasers

1. Crystal

a. Miscellaneous	1
b. Ruby	---
c. LiF	1

2. Rare Earth

a. Miscellaneous	1
b. Nd ³⁺	1
c. Er ³⁺	2
d. Ho ³⁺	2
e. Tm ³⁺	---

3. Semiconductor

a. Theory	3
b. Miscellaneous Homojunction	---
c. Miscellaneous Heterojunction	3
d. GaAs	4
e. CdS	4
f. ZnSe	4
g. Pb(1-x)Sn(x)Te	4
h. InGaAsP	5

4. Glass	
a. Miscellaneous	---
b. Nd	5
c. Er	---
B. Liquid Lasers	
1. Organic Dyes	
a. Miscellaneous	6
b. Rhodamine	7
c. Polymethine	7
d. Coumarin	---
e. Phthalimide	---
f. Cyanine	---
g. Xanthene	---
h. POPOP	---
2. Inorganic Liquids	---
C. Gas Lasers	
1. Theory	7
2. Simple Mixtures	
a. Miscellaneous	---
b. He-Ne	8
c. He-Xe	---
d. He-Kr	---
e. Ar-Xe	---

3.	Molecular Beam and Ion	
a.	Miscellaneous	9
b.	Carbon Dioxide	9
c.	Carbon Monoxide	---
d.	Noble Gas	---
e.	Nitrogen	11
f.	Iodine	---
g.	Hydrogen	---
h.	Ammonia	---
i.	Carbon Tetrafluoride	---
j.	Nitrous Oxide	---
k.	Water Vapor.....	---
l.	Heavy-Water Vapor	---
m.	Submillimeter	11
n.	Metal Vapor	11
o.	Gasdynamic	12
4.	Excimer	13
5.	Dye Vapor	---
D.	Chemical Lasers	
1.	Miscellaneous	14
2.	Fluorine + Hydrogen (Deuterium)	14
3.	Photodissociation	14
4.	Transfer	14
5.	Oxygen + Iodine	---
6.	Carbon Disulfide + Oxygen	---
7.	Sulfur Hexafluoride + Hydrogen	---

E. Components

1. Miscellaneous	14
2. Resonators	
a. Design and Performance	15
b. Mode Kinetics	16
3. Pump Sources	16
4. Cooling Systems	---
5. Deflectors	16
6. Attenuators	17
7. Collimators	---
8. Diffraction Gratings	17
9. Focusers	17
10. Windows	---
11. Polarizers	18
12. Beam Shapers	18
13. Lenses	---
14. Filters	18
15. Beam Splitters	18
16. Mirrors	18
17. Detectors	19
18. Modulators	19

F. Nonlinear Optics	
1. General Theory	21
2. Frequency Conversion	25
3. Parametric Processes	26
4. Stimulated Scattering	
a. Miscellaneous Scattering	26
b. Raman	27
c. Brillouin	27
d. Rayleigh	28
5. Self-focusing'	28
6. Acoustic Interaction	28
G. Spectroscopy of Laser Materials	---
H. Ultrashort Pulse Generation	29
J. Crystal Growing	30
K. Theoretical Aspects of Advanced Lasers ..	30
L. General Laser Theory	31

II.	LASER APPLICATIONS	
A.	Biological Effects	33
B.	Communications Systems	34
C.	Beam Propagation	
1.	Theory	41
2.	Propagation in the Atmosphere	42
3.	Propagation in Liquids	48
4.	Adaptive Optics	50
D.	Computer Technology	52
E.	Holography	52
F.	Laser-Induced Chemical Reactions	54
G.	Measurement of Laser Parameters	57
H.	Laser Measurement Applications	
1.	Direct Measurement by Laser	61
2.	Laser-Excited Optical Effects	70
3.	Laser Spectroscopy	74
J.	Beam-Target Interaction	
1.	Miscellaneous Targets	79
2.	Metal Targets	81
3.	Dielectric Targets	84
4.	Semiconductor Targets	85
K.	Plasma Generation and Diagnostics	87
III.	MONOGRAPHS, BOOKS, CONFERENCE PROCEEDINGS ..	91
IV.	SOURCE ABBREVIATIONS	96
V.	AUTHOR AFFILIATIONS	101
VI.	AUTHOR INDEX	113

I. BASIC RESEARCH

A. SOLID STATE LASERS

1. Crystal

a. Miscellaneous

1. Ashurov, M.Kh.; Zharikov, Ye.V.; Laptev, V.V.; Nasyrov, I.N.; Osiko, V.V.; Prokhorov, A.M.; Khabibullayev, P.K.; Shcherbakov, I.A. (IOF; IYaFANUZ). Effect of chromium ions on the formation of color centers in garnet structure crystals. DANKA, v. 282, no. 5, 1985, 1104-1106.
2. Cherches, Kh.A.; Belokon', M.V.; Skripko, G.A.; Poskrebko, T.A.; Mayorova, M.V. (BPI). Synthesis of yttrium orthovanadate doped with neodymium and silicon. IVNMA, no. 6, 1985, 989-992.
3. Shkadarevich, A.P.; Yarmolkevich, A.R. (IFANB). New laser media using color centers in complex fluorides. IFANB. Preprint, no. 361, 1985, 24 p. (RZFZA, 85/6L947).

b. Ruby

c. LiF

4. Basiyev, T.T.; Yershov, B.V.; Kravtsov, S.B.; Mirov, S.B.; Spiridonov, V.A.; Fedorov, V.B. (IOF). LiF color center laser with an output energy of 100 joules. KVEKA, no. 6, 1985, 1125-1126.

2. Rare Earth

a. Miscellaneous

5. Antipenko, B.M.; Glebov, A.S.; Sobolev, B.P.; Uvarova, T.V. (). Thermal physics of a BaEr(sub2)F(sub8): (Tm+Ho) active medium. KVEKA, no. 5, 1985, 1078-1081.

b. Nd3+

6. Demchuk, M.I.; Mikhaylov, V.P.; Gilev, A.K.; Ishchenko, A.A.; Kudinova, M.A.; Slominskiy, Yu.L.; Tolmachev, A.I. (). Optimizing passive mode lock in a YAG laser. ZPSBA, vol. 42, no. 5, 1985, 718-723.

7. Ivanyuk, A.M.; Shakhverdov, P.A.; Belyayev, V.D.; Ter-Pogosyan, M.A.; Yermolayev, V.L. (). Picosecond potassium-gadolinium-tungstate neodymium laser with passive mode lock in a periodic pulsed operating mode. OPSPA, v. 58, no. 5, 1985, 967-969.
 8. Kaminskiy, A.A.; Kurbanov, K.; Sattarova, M.A.; Fedorov, P.P. (IKAN). Stimulated IR emission from Nd³⁺ ions in nonstoichiometric cubic fluorides. IVNMA, no. 5, 1985, 702-705.
 9. Kuratayev, I.I.; Nasel'skiy, S.P.; Novikov, V.K.; Ryabov, A.I.; Toropkin, G.N.; Yanchuk, V.G. (). Mechanism of short-lived absorption in YAG:Nd crystals. KVEKA, no. 6, 1985, 1299-1302.
 10. Rakush, V.V.; Stavrov, A.A. (). Periodic pulsed YAG:Nd³⁺ laser with an unstable resonator and a passive Q-switch based on LiF crystal with F(sub2)(sup-) color centers. ZPSBA, vol. 42, no. 6, 1985, 906-910.
 11. Sarkisyan, S.S.; Gusakov, G.M.; Komarnitskiy, A.A. (MIET). Method for stabilizing the delay time of YAG:Nd³⁺ laser pulses. PRTEA, no. 3, 1985, 160-161.
 12. Zschocke, W.; Rabe, H.; Schwarz, J.; Wiederhold, G. (). C-w Nd-YAG laser and its use in microtechnology. Beitrage zur Optik und Quantenelektronik. Band 9. CFJOBOQU, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 184-186. (RZFZA, 85/5L1246).
- c. Er³⁺
13. Antipenko, B.M.; Voronin, S.P.; Gifeysman, Sh.N.; Dumbravyanu, R.V.; Perlin, Yu.Ye.; Privalova, T.A.; Raba, O.B. (). Study on inter-center interactions in a BaYb(sub2)F(sub8)-Er³⁺ system. OPSPA, v. 58, no. 6, 1985, 1270-1275.
- d. Ho³⁺
14. Antipenko, B.M.; Glebov, A.S.; Kiseleva, T.I.; Pis'mennyy, V.A. (). A 2.12 um Ho:YAG laser. PZTFD, no. 11, 1985, 682-685.

e. Tm3+

3. Semiconductor

a. Theory

15. Marugin, A.V.; Kharchev, A.V. (GGU). Low-frequency intensity fluctuations in injection semiconductor laser radiation. Itogovaya nauchnaya konferentsiya Radiofizicheskoy fakul'teta GGU za 1983 g. Gor'kiy, 2-4 Feb 1984. Materialy. Chast' 1. VINITI. Deposit, no. 1332-85, 20 Feb 1985, 86-92. (RZFZA, 85/5Zh1).
16. Marugin, A.V.; Kharchev, A.V. (GGU). Relationship of the intensity fluctuation level in semiconductor lasers to the spectral composition of the radiation. Itogovaya nauchnaya konferentsiya Radiofizicheskoy fakul'teta GGU za 1983 g. Gor'kiy, 2-4 Feb 1984. Materialy. Chast' 1. VINITI. Deposit, no. 1332-85, 20 Feb 1985, 93-99. (RZFZA, 85/5Zh1).
17. Shcherbakov, I.A. (). Energy transfer in solids - new active media for solid state lasers. UFNA, vol. 146, no. 2, 1985, 355-357.
18. Tamm, J.W.; Herrmann, K.; Barthel, C.; Barthel, U. (). Dispersion of the refractive index in active layers of lead-salt injection lasers. PSSAB, v. A86, no. 1, 1984, 433-438. (RZFZA, 85/5L1097).
19. Vasil'yev, M.G.; Rivlin, L.A.; Solodkov, A.F.; Kharchev, A.V.; Tsaregradskiy, V.B.; Yakubovich, S.D. (VNIIOFI). High-frequency amplitude noise in stripe-geometry injection lasers. KVEKA, no. 5, 1985, 1116-1118.

b. Miscellaneous Homojunction

c. Miscellaneous Heterojunction

20. Akhekyan, A.M.; Kozlovskiy, V.I.; Korostelin, Yu.V.; Nasibov, A.S.; Popov, Yu.M.; Shapkin, P.V. (FIAN). $\text{ZnSe}(1-x)\text{Te}(x)$, $\text{Zn}(1-x)\text{Cd}(x)\text{Se}$ and $\text{Zn}(x)\text{Cd}(1-x)\text{S}$ solid solution single crystals for e-beam pumped lasers. KVEKA, no. 5, 1985, 1113-1116.
21. Bochkarev, A.E.; Dolginov, L.M.; Drakin, A.Ye.; Druzhinina, L.V.; Yeliseyev, P.G.; Sverdlov, B.N. (FIAN). InGaSbAs injection lasers at a wavelength of 1.9--2.3 μm operating at room temperature. KVEKA, no. 6, 1985, 1309-1311.

22. Bychkova, L.P.; Gegiadze, G.G.; Gulyayev, R.G.; Davarashvili, O.I.; Saginuri, M.I.; Sinyatynskiy, A.A.; Chikovani, R.I.; Shotov, A.P. (). Heterostructures based on $\text{PbS}(\text{subl-x})\text{Se}(\text{subx})$ for injection lasers prepared by molecular epitaxy. SAKNA, vol. 118, no. 3, 1985, 309-312.
23. Goldobin, I.S.; Luk'yanov, V.N.; Solodkov, A.F.; Yakubovich, S.D. (VNIIOFI). Control of spiking in a two-component heterostructure laser. KVEKA, no. 5, 1985, 953-958.
24. Gurevich, S.A.; Karpov, S.Yu.; Nesterov, S.I.; Portnoy, Ye.L.; Skopina, V.I.; Timofeyev, F.N. (FTI). An investigation of an injection Bragg heterojunction laser with high temperature stability for the wavelength of the radiation. PZTFD, no. 9, 1985, 524-530.
25. Gurevich, S.A.; Nesterov, S.I.; Portnoy, Ye.L.; Skopina, V.I.; Timofeyev, F.N. (FTI). The spectral and time characteristics of the radiation from monolithic-hybrid heterojunction lasers with Bragg mirrors. PZTFD, no. 10, 1985, 606-611.
- d. GaAs
26. Malakhova, V.I.; Solodkov, A.F.; Yakubovich, D.S. (VNIIOFI). Amplitude modulation of single-frequency injection laser radiation by a harmonic current signal. KVEKA, no. 6, 1985, 1314-1316.
- e. CdS
27. Lavrushin, B.M.; Nabiyeu, R.F.; Nasibov, A.S.; Popov, Yu.M. (FIAN). Effect of shielded Coulomb interactions on the optical amplification spectra in CdS. KVEKA, no. 5, 1985, 1084-1086.
- f. ZnSe
28. Dubrov, V.D.; Ismailov, I.; Obidin, A.Z.; Pechenov, A.N.; Popov, Yu.M. (FIAN). Lasing in ZnSe excited by Gunn domains in a streamer discharge channel. KRSFA, no. 6, 1985, 3-5.
- g. $\text{Pb}(1-x)\text{Sn}(x)\text{Te}$
29. Koren', N.N.; Matyas, E.Ye.; Kuznetsov, F.K.; Trofimova, V.I.; Shrubova, E.F. (). Reflection spectra of $\text{Pb}(\text{sub}0.8)\text{Sn}(\text{sub}0.2)\text{Te}$ films. ZPSBA, vol. 42, no. 6, 1985, 1012-1014.

h. InGaAsP

30. Alferov, Zh.I.; Arsent'yev, I.N.; Vavilova, L.S.; Garbuzov, D.Z.; Krasovskiy, V.V.; Tikunov, A.V.; Chalyy, V.P. (FTI). Selectively limited c-w injection InGaAsP/GaAsP double heterojunction laser at 0.677 μ m obtained by liquid epitaxy. FTPPA, no. 6, 1985, 1115-1118.
31. Alferov, Zh.I.; Garbuzov, D.Z.; Arsent'yev, I.N.; Ber, B.Ya.; Vavilova, L.S.; Krasovskiy, V.V.; Chudinov, A.V. (FTI). Auger profiles of the composition and luminescence studies on liquid-phase InGaAsP heterostructures with active regions of (1.5-5) \times 10(sup -6) cm. FTPPA, no. 6, 1985, 1108-1114.
32. Shokhudzhayev, N. (FIAN). Radiative characteristics and their relation with anisotropic deformation in GaInAsP/InP lasers. FIAN. Dissertation, 1985, 19 p.
33. Vasil'yev, M.G.; Goldobin, I.S.; Kurnyavko, Yu.V.; Tabunov, V.P.; Tambiyev, Yu.A.; Fedorov, Yu.F.; Yakubovich, S.D. (VNIIOFI). Optical amplification in an (InGa)AsP heterostructure at 1.3 μ m. KVEKA, no. 6, 1985, 1316-1317.
34. Vasil'yev, M.G.; Selin, A.A.; Shelyakin, A.A. (MIET). Experimental-statistical model for the process of liquid phase epitaxy of InP/InGaAsP/InP heterostructures. IVNMA, no. 6, 1985, 897-899.

4. Glass

a. Miscellaneous

b. Nd

35. Babin, S.A.; Gladyshev, V.G. (IAESOAN). Quasi-steady-state lasing in negative-feedback neodymium glass lasers. PRTEA, no. 3, 1985, 158-160.
36. Kravchenko, V.I.; Taranov, V.V. (IFANUK). Neodymium glass sweep laser with e-beam controlled radiation kinetics and spectrum. KVEKA, no. 5, 1985, 1091-1094.
37. Vorob'yev, N.S.; Korobkin, V.V. (FIAN). Two-frequency laser as a source of tunable sinusoidally modulated radiation in the picosecond time range. Pikosekundnaya elektronno-opticheskaya diagnostika v lazernykh isledovaniyakh. FIAN. Trudy, no. 155, 1985, 200-207.

c. Er

B. LIQUID LASERS

1. Organic Dyes

a. Miscellaneous

38. Baksik, A. (). Dye laser excited by a flashlamp with a hollow cathode. Patent Poland, no. 119624, 31 Aug 1984. (RZRAB, 85/6Ye104).
39. Bondar, M.V.; Przhonskaya, O.V.; Tikhonov, Ye.A. (IFANUK). Nonlinear photochemistry of polymer laser media in intense light fluxes. KVEKA, no. 6, 1985, 1242-1247.
40. Buettner, E.; Kempe, N.; Thiede, G. (). Dye laser series for c-w and picosecond operation. Beitrage zur Optik und Quantenelektronik. Band 9. CFJOBOQu, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 70-72. (RZFZA, 85/6L935).
41. Czerney, P.; Hultzs, R. (). New laser dye with broadband emission at 755 nm, excited by nitrogen laser pulses. Beitrage zur Optik und Quantenelektronik. Band 9. CFJOBOQu, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 92-94. (RZRAB, 85/5Ye98).
42. Mory, S.; Rosenfeld, A.; Koenig, R. (). Narrowband pulsed dye laser. Beitrage zur Optik und Quantenelektronik. Band 9. CFJOBOQu, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 147. (RZRAB, 85/5Ye91).
43. Peschel, C. (). Dyes for c-w dye lasers at the Center for Scientific Instrument Manufacture, Academy of Sciences GDR. Beitrage zur Optik und Quantenelektronik. Band 9. CFJOBOQu, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 150-151. (RZRAB, 85/5Ye97).
44. Rubinov, A.N.; Efendiyev, T.Sh. (IFANB). Organic dye laser. OTIZD, no. 28, 1984, 990054. (RZRAB, 85/5Ye94).
45. Skripko, G.A.; Sender, V.R.; Zolotareva, L.Ye.; Kondratyuk, N.V.; Shagov, A.A. (). Study on the lasing characteristics and service life of active elements for a tape laser. ZPSBA, vol. 42, no. 5, 1985, 723-727.

b. Rhodamine

46. Gafurov, Kh.G.; Krindach, D.P.; Nekhayenko, V.A.; Yakovlev, A.G. (MGU). Increasing the stability of a synchronously excited c-w dye laser by introduction of a nonlinear absorber. KVEKA, no. 6, 1985, 1279-1282.
47. Spiro, A.G.; Neporent, B.S.; Shilov, V.B.; Kulya, S.V.; Antonevich, G.N. (). Lasing and resonant stimulated Raman scattering in rhodamine 6G solutions under various forms of pumping. ZPSBA, vol. 42, no. 5, 1985, 743-749.

c. Polymethine

d. Coumarin

e. Phthalimide

f. Cyanine

g. Xanthene

h. POPOP

2. Inorganic Liquids

C. GAS LASERS

1. Theory

48. Demchuk, M.I.; Mikhaylov, V.P.; Yumashev, K.V.; Avdeyeva, V.I. (NIIPFP). Study on the effect of the anion in polymethine dye molecules on the output characteristics of passively mode-locked lasers. DBLRA, no. 5, 1985, 427-429.
49. Ageyev, V.A.; Khlopkov, Yu.V. (). Principles for increasing the intensity of spectral lines in a laser-electric discharge light source. ZPSBA, vol. 42, no. 3, 1985, 714-718.
50. Bakhir, L.P.; Levashenko, G.I.; Mazayev, N.V.; Katsevich, S.P.; Shuralev, S.L. (). Fast IR spectrometer with an automatic system for determining the parameters of the active media of flow-through molecular lasers. ZPSBA, vol. 42, no. 5, 1985, 727-734.

51. Basov, N.G.; Bakayev, V.G.; Ionin, A.A.; Kovsh, I.B.; Kuchayev, A.V.; Lytkin, A.P.; Paisov, V.N.; Sinitsyn, D.V.; Sobolev, V.A. (FIAN). Pulsed electroionization lasers with cryogenic cooling of the active medium. FIAN. Preprint, no. 209, 1984, 24 p. (RZFZA, 85/5L902).
52. Dem'yantseva, S.D.; Kositsyn, V.Ye.; Tabarin, V.A. (). Intracavity magnetooptic control of the intensity of radiation from a gas laser with a high-gain active medium. ZPSBA, vol. 42, no. 5, 1985, 734-739.
53. Ebert, W.; Triebel, W. (). Developmental trends in gas lasers. Beitrage zur Optik und Quanten-elektronik. Band 9. CFJOBOQu, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 1-4. (RZRAB, 85/5Ye80).
54. Ionin, A.A.; Kovsh, I.B.; Sobolev, V.A.; Urin, B.M. (). Electric-discharge high-pressure infrared lasers and their application. Itogi nauki i tekhniki. Radiotekhnika, no. 32. VINITI, 1984, 302 p. (RZFZA, 85/5L894).
55. Kuznetsov, A.A.; Sulakshin, S.S. (NIIYaFT). The excitation of gas lasers by accelerated heavy charged particles. ZTEFA, no. 5, 1985, 864-868.

2. Simple Mixtures

- a. Miscellaneous
 - b. He-Ne
-
56. Smirnov, Ye.A.; Lisenkov, A.A. (). Study on the radiation characteristics of discharge-current-modulated He-Ne lasers. Vakuumnaya i gazorazryadnaya elektronika. RRTI. Ryazan', 1984, 20-24. (RZFZA, 85/6L1033).

- c. He-Xe
- d. He-Kr
- e. Ar-Xe

3. Molecular Beam and Ion

a. Miscellaneous

- 57. Abraham, T.O.; Bakos, J.S.; Sorlei, Zs.; Tar, J. (). Investigation of frequency pulling in optically pumped far infrared methanol lasers (in English). KFKKA, no. 99, 1984, 19 p. (RZRAB, 85/6Ye37).
- 58. Naumenko, N.A.; Suchkov, A.F. (FIAN). Possibility of developing efficient electric-discharge lasers using hydrogen-containing molecules. FIAN. Preprint, no. 279, 1985, 29 p.

b. Carbon Dioxide

- 59. Aliyev, A.A.; Apollonov, V.V.; Akhunov, N.; Prokhorov, A.M.; Firsov, K.N. (IOF). Stability of a volumetric self-sustained discharge in a CO₂-N₂-He gas mixture with additives of lightly ionized substances. KVEKA, no. 5, 1985, 1067-1069.
- 60. Antyukhov, V.V.; Glova, A.F.; Kachurin, O.R.; Lebedev, F.V.; Yartsev, V.P. (IAE). Gain and saturation parameter of a waveguide CO₂ laser with a longitudinal capacitive alternating-current discharge. KVEKA, no. 5, 1985, 1102-1105.
- 61. Blaha, V.; Jiskra, J. (). Method and device for providing high stability for the output power of a CO₂ laser. Author's certificate Czechoslovakia, no. 216011, 1 Dec 1984. (RZRAB, 85/6Ye31).
- 62. Blinov, N.A.; Leont'yev, I.A.; Novoderezhkin, V.I.; Sinel'nikov, V.P.; Filippov, S.S.; Cheburkin, N.V.; Churbakov, S.V. (IPM). Correction of large-scale inhomogeneities in a pulsed non-self-sustained discharge. KVEKA, no. 5, 1985, 1069-1071.
- 63. Bohmeyer, W.; Francke, K.P.; Rudolph, R. (). Transversely excited CO₂ laser for industrial applications. Beitrage zur Optik und Quantenelektronik. Band 9. CFJBOQU, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 88-89. (RZRAB, 85/5Ye595).

64. Bulanin, V.V.; Nezhentsev, B.Yu.; Ushakov, S.N. (LPI). Experimental study on the radiation spectra of a hybrid CO₂ laser by its rotational lines. ZTEFA, no. 6, 1985, 1099-1104.
65. Dimakov, S.A.; Pel'menev, A.G.; Petrov, V.F.; Sherstobitov, V.Ye.; Yashukov, V.P. (). Effect of self-action on the structure of the field of an electroionization CO₂ laser with an unstable resonator. KVEKA, no. 6, 1985, 1285-1289.
66. Kansy, W.; Schulz, U.; Wiederhold, G. (). Device for c-w operation of a CO₂ TEA laser. Patent GDR, no. 213099, 29 Aug 1984. (RZRAB, 85/6Ye30).
67. Nevdakh, V.V. (IFANB). Breakdown of the vibrational equilibrium between levels of CO₂ molecules coupled by Fermi resonances in amplifying media. KVEKA, no. 6, 1985, 1324-1326.
68. Nevdakh, V.V. (IFANB). Using resonance absorption and amplification for diagnostics of the active media of CO₂ lasers. IFANB. Preprint, no. 353, 1984, 30 p. (RZFZA, 85/5L900).
69. Nguyen, T.Z.; Chernigovskiy, V.V. (). Study on the effect of a transverse magnetic field on the operation of a CO₂ laser. Vakuumnaya i gazorazryadnaya elektronika. RRTI. Ryazan', 1984, 15-19. (RZFZA, 85/6L894).
70. Poehler, M.; Staupendahl, G. (). The SM-150 and SM-400 FEHA CO₂ lasers. Beitrage zur Optik und Quantenelektronik. Band 9. CFJOBOQu, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 187-188. (RZRAB, 85/5Ye38).
71. Ponomarenko, A.G.; Tishchenko, V.N. (ITPn). Optimal conditions for forming quasi-steady-state pulses in a CO₂ amplifier. KVEKA, no. 6, 1985, 1179-1183.
72. Staupendahl, G. (). CO₂ lasers and their application. Beitrage zur Optik und Quantenelektronik. Band 9. CFJOBOQu, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 25-28. (RZFZA, 85/5L1247).

- c. Carbon Monoxide
 - d. Noble Gas
 - e. Nitrogen
73. Basov, N.G.; Aleksandrov, A.Yu.; Danilychev, V.A.; Dolgikh, V.A.; Kerimov, O.M.; Myznikov, Yu.F.; Rudoy, I.G.; Samarin, A.Yu.; Soroka, A.M. (FIAN). Quasi-c-w lasing in the violet spectral region from $N^{(sub)2}(sup +)$ ions in He-N₂-H₂ mixtures at high pressures. KVEKA, no. 6, 1985, 1327-1328.
- f. Iodine
 - g. Hydrogen
 - h. Ammonia
 - i. Carbon Tetrafluoride
 - j. Nitrous Oxide
 - k. Water Vapor
 - l. Heavy-Water Vapor
 - m. Submillimeter
74. Bugayev, V.A.; Shliteris, E.P. (IRE). Active medium for a submillimeter gas laser. OTIZD, no. 24, 1985, 1040559.
75. Bugayev, V.A.; Shliteris, E.P.; Kudryashova, V.A. (IRE). Submillimeter laser. OTIZD, no. 24, 1985, 1063266.
- n. Metal Vapor
76. Bogacheva, S.P.; Voronyuk, L.V.; Zapesochnyy, I.P.; Starodub, V.P.; Fedorchenko, A.M. (). Effect of cesium additives on the formation of population inversion in a recombining lithium plasma. ZPMFA, no. 6, 1984, 10-15.
77. Bokhan, P.A. (ITF). Mechanism limiting the optimal pulse repetition rate in lasers using self-terminating transitions of metal vapors. KVEKA, no. 5, 1985, 945-952.

78. Isayev, A.A.; Lemmerman, G.Yu. (FIAN). Spectral composition of pulsed radiation from a copper vapor laser with an unstable resonator. KRSFA, no. 6, 1985, 14-17.
79. Kuplyauskene, A.V.; Kuplyauskis, Z.Y. (). Study on promising transitions for the development of potassium vapor lasers in the vacuum UV. OPSPA, v. 58, no. 6, 1985, 1341-1344.
80. Prokop'yev, V.Ye.; Solomonov, V.I. (IOA). Study on a strontium vapor laser. KVEKA, no. 6, 1985, 1261-1269.
81. Sabotinov, N.; Telbizov, P. (). Lasing at Zn II lines in a transverse high-frequency discharge. Bolgarskiy fizicheskiy zhurnal, no. 5, 1984, 559-564. (RZFZA, 85/6L892).
- o. Gasdynamic
82. Achasov, O.V.; Boreysho, A.S.; Bykov, A.M.; Labuda, S.A.; Lebedev, V.F.; Morozov, A.V.; Ragozin, D.S.; Soloukhin, R.I.; Fomin, N.A. (ITMO). Study on the amplification characteristics of a CO₂ gasdynamic laser with honeycomb nozzle units. ITMO. Preprint, no. 18, 1984, 23 p. (RZFZA, 85/6L916).
83. Goryachev, S.B.; Yefremov, N.M.; Karpukhin, V.T.; Rodionov, N.B.; Chernyshev, S.M.; Sharkov, V.F. (IVTAN). Study on specific energy extraction in a gasdynamic CO₂ laser with wedge-shaped and profiled nozzle geometries. INFZA, vol. 48, no. 3, 1985, 364-369.
84. Kondrashov, S.V.; Kryuchkov, S.I.; Kudryavtsev, N.N.; Novikov, S.S.; Shcheglov, V.N. (ITMO). Study on the mechanism of superequilibrium pumping of the asymmetric mode of CO₂ in a gasdynamic CO₂ laser using a reactive CO+N(sub 2)O+H(sub 2) mixture. ITMO. Preprint, no. 5, 1984, 37 p. (RZFZA, 85/5L912).
85. Kononov, A.V. (OGU). One-dimensional gasdynamic analysis of a periodically pulsed gas laser and some similarity problems of originating motions. Nauchnaya konferentsiya molodykh uchenykh OGU, Odessa, 20-30 Mar 1984. Materialy. UkrNIINTI. Deposit, no. 347Uk-85, 15 Feb 1985, 54-62. (RZFZA, 85/6L915).
86. Kryuchkov, S.I.; Kudryavtsev, N.N.; Novikov, S.S. (). Kinetics of chemical transformation in a mixture of carbon monoxide with nitrous oxide in a gasdynamic laser. FGVZA, no. 3, 1985, 60-68.

4. Excimer

87. Baginskiy, V.M.; Basov, N.G.; Golovinskiy, P.M.; Danilychev, V.A.; Milanich, A.I.; Soroka, A.M.; Shchedrin, A.I. (). The stability of a homogeneous pumping stage for electrical discharge excimer lasers. PZTFD, no. 10, 1985, 627-631.
88. Borisov, V.M.; Vysikaylo, F.I.; Ivanova, Ye.G.; Khristoforov, O.B. (IAE). Laws governing fluorescence in KrF^* and XeF^* excimer molecules in a volumetric discharge. KVEKA, no. 6, 1985, 1191-1203.
89. Borisov, V.M.; Vysikaylo, F.I.; Khristoforov, O.B. (). Fluorescence in KrF^* in a volumetric discharge at a pre-breakdown ionization multiplication stage. KVEKA, no. 6, 1985, 1311-1313.
90. Donin, V.I.; Khapov, Yu.I.; Uymin, A.A. (IAESOAN). Change in the lasing characteristics of an e-beam-pumped repetitively pulsed XeCl laser. ZTEFA, no. 6, 1985, 1234-1237.
91. Gorban', I.S.; Zubrilin, N.G.; Kerimov, O.M.; Milanich, A.I.; Chernomorets, M.P. (). Possibility of broadening the range of lasing wavelengths of eximer molecules. Akademiya nauk Ukrainskoy SSR. Doklady, series A, no. 12, 1984, 53-55. (RZFZA, 85/6L907).
92. Izmaylov, I.A.; Kochelap, V.A. (IPANUK). Lasing from optical pumping in a bleaching wave. KVEKA, no. 6, 1985, 1270-1275.
93. Koenig, R.; Lademann, J.; Weidauer, R. (). Excimer lasers: a high-power pulsed UV light source. Beitrage zur Optik und Quantenelektronik. Band 9. CFJBOQU, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 20-24. (RZRAB, 85/5Ye45).
94. Shevera, V.S.; Gerts, S.Yu.; Papp, V.F.Z.; Malinin, A.N.; Roshko, V.V. (UzhGU). Study on the active media of electric-discharge excimer lasers using inert gas monohalides. UkrNIINTI. Deposit, no. 140Uk-85, 21 Jan 1984, 14 p. (RZFZA, 85/5L910).

5. Dye Vapor

D. CHEMICAL LASERS

1. Miscellaneous

95. Dvornikov, I.V.; Pivovar, V.A.; Sidorova, T.D. (). Calculation of gain at the $b^{(sup 1)}\Sigma^{(sup +)}(sub g) \rightarrow X^{(sup 3)}\Sigma^{(sup -)}(sub g)$ transition under pulsed photolysis of oxygen by high-power UV radiation. OPSPA, v. 58, no. 5, 1985, 1122-1127.

2. Fluorine + Hydrogen (Deuterium)

96. Barmashenko, B.D. (IPANUK). Amplification of radiation behind a shockwave front in high-pressure $H_2 + F_2$ mixtures. KVEKA, no. 6, 1985, 1174-1178.
97. L'vov, V.I.; Stepanov, A.A.; Shcheglov, V.A. (FIAN). Chain HF laser triggered by a reagent in a standing detonation wave. KVEKA, no. 5, 1985, 1034-1038.

3. Photodissociation

98. Zhurilo, T.P.; Zalesskiy, V.Yu.; Kokushkin, A.M. (). Spectra of the quantum yield of $I^{(sup 2)}P^{(sub 1/2)}$ atoms under photodissociation of laser iodide molecules. KVEKA, no. 5, 1985, 1017-1027.

4. Transfer

99. Stepanov, A.A.; Shcheglov, V.A.; Yuryshch, N.N. (FIAN). C-w chemical transfer lasers (review). KVEKA, no. 6, 1985, 1127-1173.

5. Oxygen + Iodine

6. Carbon Disulfide + Oxygen

7. Sulfur Hexafluoride + Hydrogen

E. COMPONENTS

1. Miscellaneous

100. Piotrowski, J.; Krol, J. (). Laser head. Patent Poland, no. 126908, 30 Jun 1984. (RZRAB, 85/6Ye105).
101. Voigt, J.; Stock, W. (). Cuvette with an agitator [for dye lasers]. Patent GDR, no. 211669, 18 Jul 1984. (RZRAB, 85/5Ye508).

2. Resonators

a. Design and Performance

102. Androsoy, V.P.; Veliyev, E.I.; Vertiy, A.A. (IRFEANUK). Focusing characteristics of diffraction gratings in open resonators. IVYRA, no. 5, 1985, 634-646.
103. Bekshayev, A.Ya.; Grimblatov, V.M. (). Energy method for analyzing optical resonators with deformed mirrors. OPSPA, v. 58, no. 5, 1985, 1157-1159.
104. Grabchikov, A.S.; Kvach, V.V.; Kozich, V.P.; Orlovich, V.A. (IFANB). Laser with an unstable resonator. OTIZD, no. 24, 1985, 1050507.
105. Koch, E.O.; Wendler, D. (). Absorption cell for laser resonators. Patent GDR, no. 210790, 20 Jun 1984. (RZRAB, 85/5Ye473).
106. Koshparenok, V.N.; Melezhik, P.N.; Poyedinchuk, A.Ye.; Shestopalov, V.P. (IRFEANUK). A method for increasing the Q-factor of an open resonator. ZTEFA, no. 6, 1985, 1192-1195.
107. Kravchenko, V.I.; Parkhomenko, Yu.N. (IFANUK). Calculating the selectivity of resonators with angular dispersion. KVEKA, no. 6, 1985, 1220-1226.
108. Nazarov, A.U. (TashGU). Using perturbation theory to design the radiation parameters in corner resonators. TashGU. Sbornik nauchnykh trudov, no. 686, 1982, 62-64. (RZFZA, 85/6L1038).
109. Pavel'yev, V.G.; Tsimring, Sh.Ye. (GGU). Fabry-Perot resonators with slotted coupling elements. IVYRA, no. 12, 1984, 1600-1602.
110. Ryapolov, N.F.; Trukhachev, A.V. (). Determining the electric parameters of dielectrics in quasioptic systems. Razrabotka elementov i sistem tekhnicheskoy radiooptiki. TulPI. Tula, 1984, 116-120. (RZRAB, 85/6Ye566).
111. Sumetskiy, M.Yu. (EIS). Tunnel effects in open optical resonators near the threshold of stability losses. PZTFD, no. 23, 1984, 1461-1464.
112. Vertiy, A.A.; Ivanchenko, I.V.; Popenko, N.A.; Popkov, Yu.P.; Shestopalov, V.P. (IRFEANUK). Study on wave radiation from quasioptic resonators. Part 1. IVYRA, no. 12, 1984, 1536-1544.

b. Mode Kinetics

113. Astakhov, A.V.; Butusov, M.M.; Galkin, S.L. (). Spectrum of natural oscillations in fiber resonators. Sistemy i sredstva peredachi informatsii po kanalam svyazi. Leningrad, 1984, 14-19. (RZFZA, 85/6Zh421).
114. Boytsov, V.F. (). Beam method in the theory of Gaussian beams. Part 2. OPSPA, v. 58, no. 6, 1985, 1304-1308.
115. Kocharovskaya, O.A.; Khanin, Ya.I.; Tsaregradskiy, V.B. (GGU). Coherent mode locking in three-level media. Itogovaya nauchnaya konferentsiya Radiofizicheskoy fakul'teta GGU za 1983 g., Gor'kiy, 2-4 Feb 1984. Materialy. Chast' 2. VINITI. Deposit, no. 1333-85, 20 Feb 1985, 10-15. (RZFZA, 85/5L839).
116. Kocharovskaya, O.A.; Khanin, Ya.I.; Tsaregradskiy, V.B. (IPF). Laser mode locking during mode interaction in a resonant medium with a split level. KVEKA, no. 6, 1985, 1227-1234.
117. Komarov, K.P. (IAESOAN). Steady-state pulses in a nonlinear dispersive medium with a complex dielectric permittivity. Passive laser mode lock. IAESOAN. Preprint, no. 247, 1984, 20 p. (RZFZA, 85/5L1083).

3. Pump Sources

118. Denishchik, Yu.S. (KomGMI). Pulse shaper for ignition of solid-state laser flashlamps. PRTEA, no. 3, 1985, 161-164.
119. Dobro, L.F.; Savchenko, V.F. (KubU). Experimental verification of discharge similarity laws for gas mixtures. VINITI. Deposit, no. 1062-85, 8 Feb 1985, 12 p. (RZFZA, 85/5G426).
120. Urbazayev, M.N. (IOA). Cathode luminescent radiation source for optical pumping of lasers. IOA. Preprint, no. 22, 1984, 22 p. (RZFZA, 85/5L635).

4. Cooling Systems

5. Deflectors

121. Caha, A.; Plachy, J. (). Auxiliary device for homogeneous irradiation of rectangular fields with a continuously changing area. Author's certificate Czechoslovakia, no. 225434, 1 Oct 1984. (RZRAB, 85/6Ye535).

122. Deryugin, I.A.; D'yachkina, A.V.; Kostenich, Yu.V.; Rubinov, A.N.; Talalayev, M.A.; Yefendiyev, T.Sh. (). Tuning the lasing wavelength of a distributed feedback dye laser using an acoustooptic deflector. ZPSBA, vol. 42, no. 5, 1985, 860-861.

6. Attenuators

123. Aganin, A.V. (GOI). Diffractional attenuators for equalizing the intensities of the interfering beams in dual-beam interferometers. OPMPA, no. 5, 1985, 52-53.
124. Morshnev, S.K.; Ryabov, A.S.; Frantsesson, A.V. (). Fiber thermooptic attenuator. RAELA, no. 5, 1985, 1034-1036.

7. Collimators

8. Diffraction Gratings

125. Gerke, R.R.; Golubenko, I.V.; Dubrovina, T.G.; Savitskiy, G.M. (). Study on the reflectional properties of hologram diffraction gratings with a symmetric profile of lines. OPSPA, v. 58, no. 6, 1985, 1318-1322.
126. Korn, G.; Jurgeit, R.; Polze, S.; Guether, R. (). Increasing the radiation resistance of holographic diffraction gratings and their properties. EXPPA, no. 6, 1984, 555-558. (RZRAB, 85/5Ye762).
127. Petrov, V.S.; Fabrikov, V.A. (VNIIOFI). Calculating the diffraction efficiency of dielectric phase reflection gratings. VINITI. Deposit, no. 1829-85, 13 Mar 1985. 12 p. (RZFZA, 85/6L677).
128. Vertushkin, V.K.; Mal'tsev, V.V.; Petrov, A.S.; Fabrikov, V.A. (VNIIOFI). Calculated correlations and graphics for evaluating the characteristics of radiation couplers in diffraction gratings. VINITI. Deposit, no. 1828-85, 13 Mar 1985. 21 p. (RZFZA, 85/6L676).

9. Focusers

129. Voronov, V.I.; Pol'skiy, Yu.Ye. (GOI). Numerical study on the focusing of ring beams with Gaussian amplitude distribution according to the width of the ring. OPMPA, no. 5, 1985, 5-8.

10. Windows

11. Polarizers

130. Bokut', B.V.; Mityurich, G.S.; Shepelevich, V.V. (GomGU; MoGPI). Absorptive gyrotropic crystals in a system of arbitrarily oriented elliptic polarizers. KRISA, no. 3, 1985, 431-436.

12. Beam Shapers

131. Heumann, E.; Schastak, S. (). Laser pulse generator with approximately rectangular spatial intensity distribution. Patent GDR, no. 211022, 27 Jun 1984. (RZRAB, 85/5Ye503).

13. Lenses

14. Filters

132. Kusch, S.; Minor, U.C.; Nickles, P.V.; Will, I. (). Spatial frequency filter for high-power laser radiation. Beitrage zur Optik und Quantenelektronik. Band 9. CFJOBOQu, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 45-47. (RZFZA, 85/5L1244).
133. Tsy-pin, V.I.; Obanin, V.Yu. (GOI). Narrowband filters in the visible range for eliminating extraneous passbands. OPMPA, no. 6, 1985, 58-59.
134. Vinogradova, T.A.; Depman, N.P.; Rodionov, Ye.P.; Sidorenko, A.A. (GOI). Spectrally tunable interference polarization filter in the near infrared. OPMPA, no. 5, 1985, 57-60.

15. Beam Splitters

135. Bobak, W.; Jankiewicz, Z. (). Electrooptic beam splitter for optical studies. OPAPB, no. 1, 1984, 41-49. (RZFZA, 85/5L703).
136. Kapustin, V.P.; Makarov, V.I.; Afinogenova, Ye.V.; Kosarev, A.A. (). Method for assembling a fiberoptic splitter. OTIZD, no. 38, 1984, 1118943. (RZRAB, 85/5Ye315).

16. Mirrors

137. Barkovskiy, L.M.; Borzdov, A.N.; Borzdov, G.N.; Kamach, Yu.E.; Ovchinnikov, V.M. (GOI). Polarization characteristics of corner reflectors. OPMPA, no. 6, 1985, 23-26.

138. Bondarchuk, Ya.M.; Leont'yev, V.G.; Lipskiy, V.V. (). Using combined mirrors to suppress competitive lasing at 3.39 μm in He-Ne lasers in the visible range. OPSPA, v. 58, no. 6, 1985, 1362-1364.
139. Karabutov, A.A.; Platonenko, V.T.; Chupryna, V.A. (MGU). Optoacoustic method for measuring the light energy that can be absorbed by the surface of mirrors. MGU. Preprint, no. 25, 1984, 4 p. (RZFZA, 85/5L742).
140. Kotomtseva, L.A.; Loyko, N.A.; Samson, A.M. (). Lasing characteristics of a laser with identical mirror reflection coefficients. ZPSBA, vol. 42, no. 5, 1985, 857-860.
141. Vigak, V.M.; Kolesov, V.S.; Yasinskiy, A.V. (). Optimal control of temperature displacements of the optical surface of laser mirrors. FKOMA, no. 3, 1985, 25-30.

17. Detectors

142. Andreyev, V.I.; Granovskiy, A.B.; Yakovlev, V.A. (VNIIOFI). Low-inertia uncooled pulsed laser radiation detector. KVEKA, no. 6, 1985, 1295-1297.
143. Gushchin, Ye.M.; Lebedev, A.N.; Somov, S.V. (MIFI). Gas mixture for electronic radiation detectors. OTIZD, no. 18, 1985, 1155971.
144. Kharuto, A.V. (). Computer modeling and optimization of digital photodetectors. RATEA, no. 12, 1984, 65-68. (RZRAB, 85/5Ye483).
145. Komlyakov, V.V. (). Antinoise correction in optical signal detectors. PETSD, no. 24, 1984, 12-17. (RZRAB, 85/5Ye478).

18. Modulators

146. Al'tshuler, G.B.; Dul'neva, Ye.G.; Yerofeyev, A.V.; Meshkovskiy, I.K.; Okishev, A.V. (LITMO). Phototropic microporous glass switches activated by dye molecules. KVEKA, no. 5, 1985, 1094-1096.
147. Demchuk, M.I.; Mikhaylov, V.P.; Yumashev, K.V.; Yeremeyeva, Ye.P.; Ishchenko, A.A.; Pavlovich, V.S.; Smirnova, Z.A.; Tolmachev, A.I. (NIIPFP). Passive film shutters based on thiopyrillocyanine dyes for infrared region picosecond lasers. ZTEFA, no. 6, 1985, 1218-1220.

148. Ivanov, A.V.; Kopylov, Yu.L.; Kravchenko, V.B.; Kucha, V.V.; Tukhvatulin, R.Sh. (LPI). Effect of the doping of bismuth silicate crystals on the characteristics of an e-beam spatial light modulator. ZTEFA, no. 12, 1984, 2416-2418.
149. Kalinin, Yu.M. (). Using electron multipliers with a heater cathode to control electrooptic switches in actively mode-locked lasers. Elektrovakuum. pribory dlya metrolog. obespecheniya bystroprotekayushch. protsessov. Moskva, 1984, 13-15. (RZFZA, 85/5L700).
150. Khetschinaschwili, D.; Rentsch, S.; Schroeder, B.; Wabnitz, H. (). Picosecond spectroscopic studies of DODCI laser modulator dyes. Beitrage zur Optik und Quantenelektronik. Band 9. CFJBOQu, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 134-135. (RZRAB, 85/5Ye211).
151. Sukhotin, S.A.; Golubev, V.V.; Kunin, V.Ya. (LPI). Relaxation of the field in a waveguide metal-dielectric-semiconductor light modulator using the Frantz-Keldysh effect. ZTEFA, no. 5, 1985, 951-954.
152. Vasil'yeva, M.A.; Gul'binas, V.; Kabelka, V.; Masalov, A.V.; Syrus, V. (FIAN, IFANLi). Inertialess light-controlled induced-grating optical switch. KVEKA, no. 6, 1985, 1292-1294.
153. Vvedenskiy, Yu.V.; Zuyev, A.B.; Karimbayev, D.D.; Prihod'ko, G.L.; Khrustalev, A.A. (GPI). S-diode nanosecond pulse generators for modulation of semiconductor oscillators. PRTEA, no. 3, 1985, 123-125.
154. Yakimovich, A.P. (). Controlling the shape of the characteristic curve of a light modulator by internal electrooptic feedback. KVEKA, no. 5, 1985, 1072-1074.
155. Yegorov, M.M.; Stepanov, B.M. (). Vacuum photoelement with picosecond time resolution. Elektrovakuum. pribory dlya metrolog. obespecheniya bystroprotekayushch. protsessov. Moskva, 1984, 8-12. (RZFZA, 85/5L641).
156. Zartov, G.D.; Peyeva, R.A.; Panayotov, K.P. (). Tunable multilayer interference laser light modulator (in English). Bolgarskaya akademiya nauk. Doklady, no. 10, 1984, 1303-1306. (RZRAB, 85/6Ye215).

F. NONLINEAR OPTICS

1. General Theory

157. Aleksandrov, S.N.; Nemenov, M.I.; Ryvkin, B.S. (FTI). The saturation of the absorption of light in a p-n transition in the Keldysh-Frantz effect due to a barrier photovoltage. PZTFD, no. 10, 1985, 612-615.
158. Andryushin, A.I.; Kazakov, A.Ye.; Fedorov, M.V. (). Autoionization states of atoms in a resonant electromagnetic field. Role of interference of transitions. Nelineynyye protsessy v dvukhelektronnykh atomakh. Moskva, 1984, 159-181. (RZFZA, 85/5L73).
159. Arutyunyan, Kh.S.; Barsukov, K.A. (). TM surface waves at the boundary of a dielectric with nonlinear properties. OPSPA, v. 58, no. 5, 1985, 1064-1067.
160. Arutyunyan, R.V.; Yenaki, N.A.; Il'inskiy, Yu.A. (). Collective retardation of superradiant decay. OPSPA, v. 58, no. 2, 1985, 257-261.
161. Arutyunyan, R.V.; Yenaki, N.A.; Il'inskiy, Yu.A. (). Splitting of a chain of equations for superradiation in a two-level system. OPSPA, v. 58, no. 2, 1985, 252-256.
162. Arutyunyan, V.M.; Badanyan, N.Sh.; Shakhnazaryan, N.V. (). Effect of collisions on Raman scattering. IAAFA, no. 6, 1984, 336-339. (RZFZA, 85/6L856).
163. Baklanov, Ye.V.; Barashev, V.A.; Dubetskiy, B.Ya. (ITF). Nonlinear absorption of an ion gas in a magnetic field. KVEKA, no. 6, 1985, 1204-1210.
164. Bashkirov, Ye.K.; Shumovskiy, A.S.; Yukalov, V.I. (OIYaI). Dynamics of superradiative oscillation in ferroelectrics. DANKA, v. 282, no. 2, 1985, 300-303.
165. Belousov, A.V.; Kovarskiy, V.A.; Sinyavskiy, E.P.; Keloglu, O.Yu. (). Optical properties of free and impurity anharmonic molecules in a low-frequency resonance radiation field. Kineticheskiye protsessy v primesnykh poluprovodnikovakh vo vneshnykh polyakh. Kishinev, 1984, 32-41. (RZFZA, 85/6L859).
166. Berman, G.P.; Zaslavskiy, G.M.; Kolovskiy, A.R. (IFSOAN). Nonlinear resonance and stochasticity in a system of surface electrons. ZETFA, v. 88, no. 5, 1985, 1551-1559.

167. Bersons, I.Ya. (). Quasi-classical description of multiphoton processes in highly excited atoms. Nelineynyye protsessy v dvukhelektronnykh atomakh. Moskva, 1984, 182-208. (RZFZA, 85/5L72).
168. Bogolyubov, N.N.; Fam Le Kien; Shumovskiy, A.S (OIYaI). Exact results for a model of a three-level atom. OIYaI. Preprint, no. Yel7-84-637 (in English), 1984, 6 p. (RZFZA, 85/5L848).
169. Bogolyubov, N.N.; Fam Le Kien; Shumovskiy, A.S (OIYaI). Photon statistics and atomic dynamics in a three-level plus two-mode model. OIYaI. Preprint, no. Yel7-84-673 (in English), 1984, 6 p. (RZFZA, 85/5L22).
170. Bogolyubov, N.N.; Fam Le Kiyen; Shumovskiy, A.S (OIYaI). Dynamics of multiphoton processes in two-level systems. TMFZA, no. 3, 1985, 461-471.
171. Boyko, S.A.; Dykman, M.I.; Lisitsa, M.P.; Sidorenko, V.I.; Tarasov, G.G. (). Variation of resonance radiation polarization due to self-induced dichroism in KCl:Li crystals with F(subA) centers. OPSPA, v. 58, no. 5, 1985, 1055-1058.
172. Bykova, N.G.; Bykova, O.G.; Lebedeva, V.V.; Ageshin, S.F.; Preobrazhenskiy, N.G. (ITPM). Properties of nonlinear resonances at coupled Doppler broadened transitions. Part 2. Detached resonance and its properties. ITPM. Preprint, no. 26, 1984, 25 p. (RZFZA, 85/5L852).
173. Chebotayev, V.P. (ITF). Observation of an echo in an ensemble of classical oscillators (mechanical echo). ITF. Preprint, no. 85, 1983, 6 p. (RZFZA, 85/6L830).
174. Derbov, V.L.; Novikov, A.D.; Sorokina, L.A. (). Quasi-energy asymptotics of vibrational-rotational transitions at high values of the angular moment. Nekotoryye voprosy sovremennoy fiziki. Saratov, 1984, 3-10. (RZFZA, 85/5L861).
175. Dohnalik, T.; Koperski, J.; Stankiewicz, M.; Zakrzewski, J.; Zyczkowski, K. (). Quantum beats in forward scattering of resonance radiation (in English). ATPLB, v. A66, no. 5, 1984, 493-501. (RZFZA, 85/6L854).
176. Faradzhev, B.G.; Areshev, I.P.; Stepanova, M.I.; Subashiyev, V.K. (FTI). Resonatorless optical bistability in n-InP. PZTFD, no. 12, 1985, 753-757.

177. Ivanenko, M.M.; Churakov, V.V. (IFANB). Spectral characteristics of a three-level system as distinct from a zero angular moment. IFANB. Preprint, no. 343, 1984, 24 p. (RZFZA, 85/5L849).
178. Kocharovskaya, O.A. (GGU). Rabi frequencies of a two-level atom in an intense polyharmonic field. Itogovaya nauchnaya konferentsiya Radiofizicheskoy fakul'teta GGU za 1983 g., Gor'kiy, 2-4 Feb 1984. Materialy. Chast' 2. VINITI. Deposit, no. 1333-85, 20 Feb 1985, 16-21. (RZFZA, 85/5L846).
179. Korneyev, V.I.; Akhmediyev, N.N. (). Interaction of Gaussian beams with the surface of nonlinear media. Fizika mikroelektronnykh priborov. Moskva, 1984, 54-62. (RZRAB, 85/6Ye658).
180. Langbein, U.; Lederer, F.; Ponath, H.E. (). Nonlinear optical processes in waveguides. Beitrage zur Optik und Quantenelektronik. Band 9. CFJOBOQu, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 35-38. (RZFZA, 85/6L873).
181. Lavrik, V.V.; Ovander, L.N.; Shunyakov, V.T. (). Two Hamiltonian forms of interaction of radiation and matter. OPSPA, v. 58, no. 6, 1985, 1207-1211.
182. Monozon, B.S.; Ignat'yeva, L.A. (LKI). Absorption of one from two interacting strong light waves in a semiconductor. ZETFA, v. 88, no. 2, 1985, 593-603.
183. Morozov, V.A.; Shorygin, P.P.; Gutop, Yu.V. (). Formation of secondary radiation pulsed of light by molecules (Rayleigh scattering and fluorescence). OPSPA, v. 58, no. 2, 1985, 324-330.
184. Onishchenko, N.S. (BGU). Calculating the cubic members of electric and magnetic polarization of a medium, allowing for the electric quadrupole and magnetic dipole moments. VBMFA, no. 1, 1985, 9-12. (RZFZA, 85/6L1060).
185. Oseledchik, Yu.S. (). Optical bistability of a resonance saturable absorber in a random field (in English). Metody opredeleniya: atomy volnovykh funktsiy. Moskva, 1984, 196-247. (RZFZA, 85/6L872).
186. Romanov, A.B.; Savchenko, M.A.; Shcherbakov, I.V. (MIREA). Nonlinear evolution of laser radiation and semiconductor plasma. FTPPA, no. 5, 1985, 962-964.

187. Rubinshteyn, B.Ya. (UrPI). Cooperative relaxation in a system of three-level molecules. Nauchno-tekhnicheskaya konferentsiya UrPI, 7th, Sverdlovsk, 7-10 Feb 1984. Materialy. VINITI. Deposit, no. 2125-85, 26 Mar 1985, 82-88. (RZFZA, 85/6L858).
188. Sapondzhyan, S.O.; Sarkisyan, D.G.; Torosyan, G.A. (IFI). Electron stimulated Raman scattering and four-photon interaction in barium atom vapor pumped by tunable ultrashort light pulses. KVEKA, no. 5, 1985, 963-971.
189. Suesse, K.E.; Vogel, W.; Welsch, D.G. (). Fluctuations of the pump field and electron vibrational excitation in resonance fluorescence. Beitrage zur Optik und Quantenelektronik. Band 9. CFJBOQu, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 39-41. (RZFZA, 85/6L834).
190. Trofimov, V.A. (MGU). Nonlinear distortions of hypertubular light beams. IVYRA, no. 5, 1985, 624-633.
191. Yenaki, N.A.; Il'inskiy, Yu.A. (). Calculation of delay in superradiation processes. OPSPA, v. 58, no. 1, 1985, 116-121.
192. Yevseyev, I.V.; Reshetov, V.A. (). Coherent radiation in temporally spaced fields formed at levels with a hyperfine structure. OPSPA, v. 58, no. 2, 1985, 276-280.
193. Yevseyev, I.V.; Yermachenko, V.M.; Reshetov, V.A. (MIFI). Polarization properties of modified stimulated photon echo in ytterbium vapor. ZFPRA, v. 41, no. 4, 1985, 132-133.
194. Zavorotnev, Yu.D.; Ovander, L.N. (). Raman scattering by bound states of vibrational excitons. OPSPA, v. 58, no. 1, 1985, 79-84.
195. Zyul'kov, V.A.; Gribkovskiy, V.P.; Ivanov, V.A.; Kotibnikov, M.A.; Pavlovskiy, V.N. (IFANB). Method for shaping submicrosecond pulses of laser radiation. OTIZD, no. 24, 1985, 1094543.

2. Frequency Conversion

196. Aktsipetrov, O.A.; Baranova, I.M.; Yelovikov, S.S.; Yelyutin, P.V.; Yesikov, D.A.; Nikulin, A.A.; Fominykh, N.N. (MGU). Giant second harmonic and size effects in ultrasmall metal particles. ZFPRA, v. 41, no. 12, 1985, 505-508.
197. Astaf'yev, A.V.; Sirotinkin, V.P.; Stefanovich, S.Yu. (NIFKhI). Phase transitions in $\text{Ln}(\text{sub}3)\text{NbO}(\text{sub}7)$ compounds with a fluorite-like structure. KRISA, no. 3, 1985, 603-604.
198. Bokut', B.V.; Khilo, N.A.; Khilo, P.A. (IFANB). Second harmonic generation during diffraction of a light wave by ultrasound. IFANB. Preprint, no. 352, 1984, 18 p. (RZFZA, 85/5L1100).
199. Bokut', B.V.; Lugina, A.S. (). Vector synchronism in broadband nonlinear laser frequency doublers. DBLRA, no. 6, 1985, 519-522.
200. Mironov, A.V. (). Frequency shifts in a laser stabilized by saturated absorption in iodine. OPSPA, v. 58, no. 5, 1985, 1128-1132.
201. Mironov, G.V.; Popov, A.K.; Slabko, V.V. (IFSOAN). Compensation for the high-frequency Kerr effect during third harmonic generation in a focused pumping field. IFSOAN. Preprint, no. 309F, 1984, 15 p. (RZFZA, 85/5L1104).
202. Popov, A.K.; Timofeyev, V.P. (IFSOAN). Addition of radiation frequencies in nonlinear gaseous media under resonant two-photon pumping. Part 1. IFSOAN. Preprint, no. 295F, 1984, 45 p. (RZFZA, 85/5L1119).
203. Popov, A.K.; Timofeyev, V.P. (IFSOAN). Addition of radiation frequencies in nonlinear gaseous media under resonant two-photon pumping. Part 2. IFSOAN. Preprint, no. 296F, 1984, 32 p. (RZFZA, 85/5L1120).
204. Samokhvalov, A.V.; Sorokin, Yu.M. (GGU). Doppler effect for higher order harmonics at the boundary of a moving nonlinear medium. ZETFA, v. 88, no. 2, 1985, 355-359.
205. Samsonova, L.G.; Kopylova, T.N.; Degtyarenko, K.M.; Tarasenko, V.F.; Afanasiadi, L.Sh.; Turr, I.N. (). Bifluorophors - converters of excimer laser radiation. ZPSBA, vol. 42, no. 6, 1985, 910-915.

3. Parametric Processes

206. Bolotskikh, L.T.; Popkov, V.G.; Popov, A.K.; Shalayev, V.M. (IFSOAN). Degenerate multiphoton parametric scattering of IR radiation by vibrational-rotational transitions of molecules. IFSOAN. Preprint, no. 285F, 1984, 18 p. (RZFZA, 85/5L1162).
207. Butylkin, V.S.; Shalyayev, M.F. (IRE). Improving the efficiency of parametric frequency conversion and multipass cells. KVEKA, no. 5, 1985, 1097-1099.
208. Golubev, Yu.M.; Gorbachev, V.N.; Zanadvorov, P.N. (LGU). Onset of a quantum state of a field under absorption conditions in resonance parametric interactions. VINITI. Deposit, no. 1683-85, 5 Mar 1985, 11 p. (RZFZA, 85/6L839).

4. Stimulated Scattering

a. Miscellaneous Scattering

209. Basov, N.G.; Danilychev, V.A.; Rudoy, I.G.; Soroka, A.M. (FIAN). Stimulated scattering in a gaseous medium excited in an electric field. PZTFD, no. 10, 1985, 577-580.
210. Basov, N.G.; Danilychev, V.A.; Rudoy, I.G.; Soroka, A.M. (FIAN). Effect of stimulated scattering in the active media of electric-field-pumped gas lasers, on the divergence of their radiation. PZTFD, no. 10, 1985, 591-594.
211. Petrosyan, K.B.; Pokhsranyan, K.M. (NIIFKS). Coherent four-photon scattering by oblique polaritons in LiIO(sub3) crystals. IAAFA, no. 3, 1985, 154-159.
212. Zel'dovich, B.Ya.; Merzlikin, S.K.; Pilipetskiy, N.F.; Sukhov, A.V. (IPMe). Observation of stimulated orientational scattering of light before a planar nematic. ZFPRA, v. 41, no. 10, 1985, 418-421.
213. Zozulya, A.A.; Silin, V.P.; Tikhonchuk, V.T. (FIAN). Stimulated Raman scattering by the process of stimulated Brillouin scattering. FIAN. Preprint, no. 199, 1985, 13 p.

b. Raman

214. Arutyunyan, V.M.; Badanyan, N.Sh.; Shakhnazaryan, N.V. (). Transient resonance Raman and three-photon scattering. VINITI. Deposit, no. 553-85, 21 Jan 1985, 8 p. (RZFZA, 85/5L1130).
215. Baranov, V.Yu.; Borisov, V.M.; Vinokhodov, A.Yu.; Kiryukhin, Yu.B.; Stepanov, Yu.Yu. (IAE). Stimulated Raman scattering of radiation from an electric-discharge periodic pulsed XeCl laser in compressed H(sub2). KVEKA, no. 5, 1985, 1100-1102.
216. Bespalov, V.G.; Dukhovnyy, A.M.; Stasel'ko, D.I. (). Experimental study on the spatial coherence of stimulated Raman scattering radiation under various conditions of its excitation in compressed hydrogen. OPSPA, v. 58, no. 5, 1985, 1038-1042.
217. Gorelik, V.S.; Divak, V.B.; Sushchinskiy, M.M. (). Raman scattering by surface optical phonons in crystalline powders. FTVTA, no. 5, 1985, 1539-1541.
218. Spiro, A.G.; Neporent, B.S.; Shilov, V.B.; Kulya, S.V. (). Spectral characteristics of stimulated secondary emission and structural characteristics of xanthene dye molecules. OPSPA, v. 58, no. 5, 1985, 1187-1192.
219. Zabolotskaya, Ye.A.; Kravtsov, Yu.A. (IOF). Comparison of stimulated Raman scattering of sound by bubbles and stimulated Raman scattering of light. AKZHA, no. 3, 1985, 338-341.

c. Brillouin

220. Anikeev, I.Yu.; Gordeyev, A.A.; Zubarev, I.G.; Mironov, A.B.; Mikhaylov, S.I. (FIAN). Gain and lifetime of acoustic phonons in stimulated Brillouin scattering in titanium tetrachloride. KVEKA, no. 5, 1985, 1081-1083.
221. Kagan, V.D.; Pogorel'skiy, Yu.V. (). Stability of steady-state stimulated Brillouin scattering. ZETFA, v. 88, no. 1, 1985, 17-20. (RZRAB, 85/6Ye657).
222. Karasik, A.Ya.; Luchnikov, A.V. (IOF). Nanosecond pulse generation from stimulated Brillouin scattering in a single-mode glass fiber lightguide. KVEKA, no. 6, 1985, 1319-1321.

d. Rayleigh

223. Agal'tsov, A.M.; Gorelik, V.S.; Moiseyenko, V.N. (FIAN). Hyper-Rayleigh scattering near the point of ferroelectric phase transition in a near-surface layer of barium titanate. KRSFA, no. 5, 1985, 49-52.

5. Self-focusing

224. Osipov, A.I.; Panchenko, V.Ya.; Filippov, A.A. (MGU). Self-focusing of laser radiation induced by non-equilibrium vibrational excitation of molecules. ZTEFA, no. 6, 1985, 1172-1174.

6. Acoustic Interaction

225. Aksenov, Ye.T.; Kukharev, A.V.; Kopovskiy, A.A.; Pavlenko, A.V.; Petrun'kin, V.Yu. (MEI). Integrated acoustooptic spectrum analyzer. Possibilities and prospects. MEI. Nauchnyye trudy, no. 19, 1983, 146-151. (RZRAB, 85/6Ye558).
226. Andreyev, A.M.; Ginzburg, V.M. (). Refraction and scattering of electromagnetic waves at an air-water interface deformed by the radiation pressure of ultrasound. RAELA, no. 5, 1985, 881-885.
227. Babonas, G.A.; Reza, A.A.; Leonov, Ye.I.; Shandaris, V.I. (IFPV). Photoelastic properties of $\text{Bi}(\text{sub}12)\text{SiO}(\text{sub}20)$. ZTEFA, no. 6, 1985, 1203-1205.
228. Belova, G.N.; Remizova, Ye.I. (AKIN). Acoustooptic interaction in a homeotropically oriented layer of a nematic liquid crystal during its periodic shift deformation. AKZHA, no. 3, 1985, 289-295.
229. Gevorkyan, E.V.; Yezhov, S.G. (). Acoustooptic effect in nematic liquid crystals in the presence of an electric field. VZMI. Mezhvuzovskiy sbornik nauchnykh trudov, no. 36, 1984, 46-52. (RZFZA, 85/51142).
230. Kolomenskiy, A.A.; Lyamtsev, M.L.; Mikhalevich, V.G.; Rodin, A.M. (IOF). Generation of sound by laser radiation. IANFA, no. 6, 1985, 1121-1128.
231. Kolomenskiy, A.A.; Mikhalevich, V.G.; Nikiforov, S.M.; Rodin, A.M. (IOF). Characteristics of opto-acoustic generation of sound in liquids during surface optical breakdown. IANFA, no. 6, 1985, 1129-1131.

232. Petrov, D.V.; Chtyrok, J. (from Czechoslovakia) (Chtyrok, I.). (IFPSOAN). Acoustooptic conversion of a guided mode to a leaky wave in a LiNbO_3 :Ti waveguide. KVEKA, no. 5, 1985, 987-997.
 233. Stashkevich, A.A. (). Anisotropic light diffraction by two harmonics of ultrasound. OPSP, v. 58, no. 6, 1985, 1291-1295.
 234. Vinokurov, S.A. (). "Membrane" effect in optoacoustics. PZTFD, no. 12, 1985, 705-709.
 235. Zil'berman, G.Ye.; Proklov, V.V.; Kupochenko, L.F.; Goltvyanskaya, G.F. (). Nonmutual acoustooptic effect in a medium with significant dispersion of dielectric permittivity. RAELA, no. 1, 1985, 156-162.
- G. SPECTROSCOPY OF LASER MATERIALS
- H. ULTRASHORT PULSE GENERATION
236. Birmontas, A.; Vasilyauskas, V.; Piskarskas, A.; Stabinis, A. (VilGU). Disperse spreading of femtosecond light pulses in crystals, air and water. KVEKA, no. 6, 1985, 1191-1195.
 237. Demchuk, M.I.; Mikhaylov, V.P.; Gilev, A.K.; Shkadarevich, A.P.; Stavrov, A.A.; Kovalev, D.V. (NIIPFP). Limiting parameters of ultrashort pulses in a lanthanum beryllate laser. KVEKA, no. 6, 1985, 1304-1307.
 238. Dietel, W.; Doepel, E. (). Device for generating laser pulses less than 100 femtoseconds. Patent GDR, no. 214260, 3 Oct 1984. (RZRAB, 85/6Yel01).
 239. Dietel, W.; Doepel, E.; Rudolph, W.; Wilhelmi, B. (). Femtosecond pulse generation. Beitrage zur Optik und Quantenelektronik. Band 9. CFJBOQu, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 74-77. (RZFZA, 85/6L1049).
 240. Kandidov, V.P.; Ognev, L.I.; Platonenko, V.T. (MGU). Ultrashort pulse shaping in a CO_2 amplifier with a spatially bounded amplification region. KVEKA, no. 5, 1985, 1105-1107.
 241. Lariontsev, Ye.G. (NIYaF). Width of the active mode-lock region in a solid-state laser. KVEKA, no. 6, 1985, 1322-1324.

242. Vvedenskiy, Yu.V.; Zuyev, A.B.; Siz'min, A.M. (NIRFI). Measuring the time characteristics of optical elements at femtosecond resolution. IVYRA, no. 6, 1985, 798-800.
- J. CRYSTAL GROWING
243. Akimova, I.V.; Berezina, T.I.; Pechenov, A.N.; Reshetov, V.I.; Reshetova, L.Ye.; Shapkin, P.V. (FIAN). Effect of excess sulfur pressure in the growing of CdS crystals on the characteristics of e-beam-excited lasers. KVEKA, no. 6, 1985, 1307-1309.
- K. THEORETICAL ASPECTS OF ADVANCED LASERS
244. Andreyev, A.V.; Krashenninnikova, T.I. (MGU). Resonance radiation of channeled particles. ZTEFA, no. 11, 1984, 2131-2135.
245. Baci, G.; Martin, D.; Niculescu, V.; Nitoiu, A.; Radu, A. (). Influence of the electron current density on the instability regime of a free-electron laser with combined helical and axial magnetic fields (in English). Central Institute of Physics, Romania. Reports, no. LOP 46, 1984, 12 p. (RZFZA, 85/5L867).
246. Bessonov, Ye.G. (FIAN). Theory of free-electron parametric lasers. FIAN. Preprint, no. 195, 1985, 22 p.
247. Bogdankevich, L.S.; Rukhadze, A.A. (IOF). The theory of a heavy-current, relativistic electron beam free electron laser. ZTEFA, no. 5, 1985, 913-916.
248. Ginzburg, N.S. (). Nonlinear theory of stimulated undulator emission and stimulated scattering of waves by magnetically controlled relativistic e-beams in transversely bounded electrodynamic systems. CVSRVEle, 3rd, Gor'kiy, 22-24 Feb 1983. Vypusk 3. Gor'kiy, 1983, 26-95. (RZFZA, 85/5G53).
249. Kanavets, V.I.; Korzhenevskiy, A.V.; Cherepenin, V.A. (IRE). The coherent magnetic drift radiation from a relativistic electron flux. ZTEFA, no. 5, 1985, 940-942.
250. Kurin, A.F. (VGU). Amplification of extraordinary waves by rectilinear electron fluxes. ZTEFA, no. 5, 1985, 932-934.
251. Oganessian, S.G. (NIIFKS). Cerenkov laser in a total-internal-reflection operating mode. KVEKA, no. 5, 1985, 1058-1063.

252. Skoric, M.M.; Stokic, Lj. (). Theory of collective-Raman free-electron lasers (in English). CYUSSPIG, CISPIGas, 12th, Sibenik, 3-7 Sep 1984. Contrib. Pap. and Abstr. Invit. Lect. and Progr. Repts. Belgrade, yr of publ not given, 610-612. (RZFZA, 85/5L865).
 253. Zakharov, V.P.; Kulish, V.V. (). Explosive instability of a relativistic electron flux in a dispersing e-m wave field. UFZHA, no. 6, 1985, 878-881.
- L. GENERAL LASER THEORY
254. Akhiezer, A.I. (FTIANUK). Khar'kov school of theoretical physics. UFZHA, no. 5, 1985, 645-661.
 255. Baehr, J. (). Use of lasers and quantum electronics in elementary particle physics. Beitrage zur Optik und Quantenelektronik. Band 9. CFJOBOQu, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 31-34. (RZRAB, 85/5Ye665).
 256. Bandilla, A. (). Theoretical study on m-photon lasers in terms of a generalized Scully-Lamb formalism. Beitrage zur Optik und Quantenelektronik. Band 9. CFJOBOQu, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 84-85. (RZRAB, 85/5Ye28).
 257. Borisov, M.; Gerdzhikov, M. (). Development of physical sciences in Bulgaria in the last 40 years (in Bulgarian). FMBMA, no. 3, 1984, 241-253. (RZFZA, 85/5A27).
 258. Brunner, W.; Fischer, R.; Paul, H. (). Chaos and order in multimode lasers. Beitrage zur Optik und Quantenelektronik. Band 9. CFJOBOQu, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 58-61. (RZFZA, 85/5L885).
 259. Fabrikant, V.A. (). In optical laboratories. FIZSA, no. 1, 1985, 8-9. (RZFZA, 85/5A98).
 260. Kalitayevskiy, N.I.; Feofilov, P.P. (biographic subject). (). In memory of Petr Petrovich Feofilov (1915-1980). OPSPA, v. 58, no. 5, 1985, 1198-1199.
 261. Kalitayevskiy, N.I.; Galanin, M.D. (biographic subject). (). Mikhail Dmitriyevich Galanin on his 70th birthday. OPSPA, v. 58, no. 5, 1985, 1197-1198.

262. Letokhov, V.S. (). Quantum electronics. Fizika XX veka: razvitiye i perspektivy. Moskva, 1984, 188-218. (RZFZA, 85/6A20).
263. Makarov, A.I.; Potemkin, A.K. (IPF). Maximum gain in a multistage laser amplifier. KVEKA, no. 5, 1985, 1054-1058.
264. Malyshev, V.N.; Salyuk, V.A.; Laryushin, A.I.; Gorelik, A.V.; Mashtakov, D.M.; Bryk, V.Ye. (). Composite laser. OTIZD, no. 24, 1985, 1056834.
265. Matorin, I.I.; Khanin, Ya.I. (). Bistable operating modes and self-stochastic dynamics of quantum oscillators. CMKNKole, 9th, Kiyev, 30 Aug - 6 Sep 1981. Vol. 3. Kiyev, 1984, 434-436. (RZRAB, 85/6Ye698).
266. Red'ko, T.P.; Borisov, Ye.N. (). Effect of higher diffuse modes in laser excitation experiments. OPSPA, v. 58, no. 6, 1985, 1345-1348.
267. Titov, A.N. (VNIFTRI). Time-of-flight effects in the theory of Lamb dip in a strong field at ultralow gas pressures. KVEKA, no. 5, 1985, 1064-1067.
268. Zmiyevskoy, G.N.; Krobka, N.I. (). Effect of spatial fluctuations in the parameters of the active medium, on the operation of a gas optical amplifier. OPSPA, v. 58, no. 5, 1985, 1115-1121.

II. LASER APPLICATIONS

A. BIOLOGICAL EFFECTS

269. Berezhiani, L.B.; Abzianidze, K.Sh.; Tavartkiladze, M.A.; Berezhiani, M.V.; Narsiya, N.Sh. (). Improving the quality of tea under laser action. *Sovremennyye problemy bioorganicheskoy khimii i khimii prirodnkh soyedineniy. Konferentsiya, Alma-Ata, 2-4 Oct 1984. Materialy. IKhNANKaz. KazNIINTI. Deposit, no. 769Ka-84, 24 Oct 1984, 535-541. (DERUD, 3/85, 755).*
270. Bol'shunov, A.V.; Georgiyeva, V.B. (VNIIGBol). Possibilities of using CO2 lasers in plastic surgery of the eyelid. *VEOFA, no. 3, 1985, 30-32.*
271. Boyarskova, V.L. (). Using chromato-mass-spectrometry to detect harmful products in air, from laser destruction of polyvinylchloride artificial leather. *Nauchnyye problemy okhrany truda na sovremennom etape. Moskva, 1984, 73-77. (Referativnyy sbornik. Sistemy, pribory i metody kontrolya kachestva okruzhayushchey sredy, 85/5.84.41).*
272. Denisov, A.B.; Kashuba, V.A. (). Change in proliferation in the epithelium of the cornea of rats under the remote action of laser radiation on various parts of integumental tissues. *VINITI. Deposit, no. 8011-84, 15 Dec 1984, 8 p. (DERUD, 4/85, 208).*
273. Ivanov, S.V.; Malakhovskiy, V.S.; Zharkov, V.P. (KurMedInst). Hemostasis during resectioning of the liver by CO2 laser. *VINITI. Deposit, no. 8223-84, 21 Dec 1984, 6 p. (DERUD, 4/85, 198).*
274. Juette, A. (). Use of lasers in ophthalmology. *Beitraege zur Optik und Quantenelektronik. Band 9. CFJBOQu, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 78-79. (RZRAB, 85/5Ye714).*
275. Lindner, H.; Knoche, H.; Giessmann, H.G. (). Principles, possibilities and limits in determining visual acuity by laser interference. *Beitraege zur Optik und Quantenelektronik. Band 9. CFJBOQu, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 80-81. (RZRAB, 85/5Ye710).*
276. Malyshev, B.N.; Salyuk, V.A.; Stepanov, V.L.; Mashtakov, D.M.; Skobelkin, O.K.; Brekhov, Ye.N. (). Method and device for cutting biological tissue. *OTIZD, no. 24, 1985, 1073914.*

277. Pavlov, A.F.; Lyubovtsev, V.B.; Undritsov, M.I.; Prokhonchukov, A.A.; Volkov, V.Ye.; Ovrutskiy, G.D. (ChuGU). Method for selecting the acupuncture point for treating periodontis patients. OTIZD, no. 17, 1985, 1153920.
 278. Pekarskiy, D.Ye.; Tkach, Yu.V.; Balenko, A.A. (KhNIIIONKh). Method for prophylaxis of post-burn keloid scars. OTIZD, no. 22, 1985, 1161121.
 279. Schroedel, G.; Schweitzer, D.; Juetter, A.; Vilser, W. (). Strain on the retina by laser radiation and ophthalmological instruments. Beitrage zur Optik und Quantenelektronik. Band 9. CFJBOQu, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 162-163. (RZRAB, 85/5Ye711).
 280. Shevel', S.S.; Chervinskiy, L.S. (). Action of optical radiation on the hide and hair of farm animals. Mekhanizmy i otsenka effektivnosti deystviya opticheskogo izlucheniya na biologicheskiye sistemy. (Mechanisms and evaluation of the efficiency of optical radiation on biological systems). IBFiz. Pushchino, 1985, 77-85.
 281. Yes'kov, A.P.; Aref'yev, I.M.; Gurilev, O.M.; Dobrovol'skiy, N.A.; Trifonov, A.A.; Utyamyshev, R.I.; Tsintsadze, G.A. (VNIIIMT). Device for analyzing sperm. OTIZD, no. 17, 1985, 1154616.
 282. Zhbanov, A.I.; Smirnov, A.Ye. (). Experimental and numerical studies on thermophysical processes in the interaction of laser radiation with biological tissue. Prikladnyye zadachi fiziki mikro- i makrosistem. SGU. Saratov, 1984. VINITI. Deposit, no. 7221-84, 12 Nov 1984, 192-197. (DERUD, 3/85, 286).
- B. COMMUNICATIONS SYSTEMS
283. Agliulov, Ye.I.; Belov, A.V.; Dianov, Ye.M.; Il'in, V.M.; Kebedzhiev, A.G. (Bulgaria); Kunev, V.G. (Bulg); Neustruyev, V.B.; Pimkin, K.V.; Khopin, V.F.; Chikolini, A.V. (IOF, IKhAN). Study on the parameters of preforms and fiber lightguides under automatic control of the diameter of the reference tube. KVEKA, no. 6, 1985, 1276-1278.
 284. Aksenov, Ye.T.; Lipovskaya, M.Yu.; Motkov, V.A.; Lipovski, A.A. (LPI). An investigation of a model of an integrated optical, diffusion structure spectral multiplexer. PZTFD, no. 9, 1985, 513-517.

285. Aleynikov, V.S.; Artyushenko, V.G.; Voytsekhovskiy, V.V.; Dianov, Ye.M.; Zubov, I.V.; Masyc'hev, V.I.; Savenkova, T.N.; Sysoyev, V.K. (IOF). Experimental fiberoptic cable for transmitting high-power CO and CO₂ laser radiation. PZTFD, no. 12, 1985, 757-760.
286. Avdeyenko, N.S.; Bulgakov, V.V.; Zagaynov, Ye.F.; Sarukhanov, Yu.A.; Sergeyev, V.P. (). Information recording device. OTIZD, no. 24, 1985, 1164908.
287. Bagayev, S.A.; Yevtushenko, I.N.; Smirnov, V.B. (). Phase-frequency characteristics of fiber lightguides. OPSPA, v. 58, no. 1, 1985, 172-177.
288. Basic, R. (). Review on development of light sources for fiberoptic communications systems. ELVEA, no. 1-2, 1984, 27-30. (RZRAB, 85/5Ye341).
289. Bazarov, Ye.N.; Kukhta, A.V.; Polukhin, A.T. (). Spatial beats of agitated waves in inhomogeneous single-mode fiber lightguides. RAELA, no. 5, 1985, 905-908.
290. Belov, A.V.; Gur'yanov, A.N.; Gusovskiy, D.D.; Dianov, Ye.M.; Kurkov, A.S.; Neustruyev, V.B.; Khopin, V.F.; Chikolini, A.V. (IOF). Bend losses in single-mode fiber lightguides. KVEKA, no. 5, 1985, 1076-1078.
291. Bessonov, Yu.L.; Vasil'yev, M.A.; Ivanov, A.V.; Kirik, Yu.M.; Konyayev, V.P.; Krivosheyev, M.I.; Marimont, Yu.I.; Shlayn, A.I.; Shcherbakov, Ye.A. (IOF). Determining the signal/noise ratio in an optical communications channel at 1.32 μ m with frequency modulation by the subcarrier frequency. IOF. Preprint, no. 191, 1985, 9 p.
292. Bondarev, L.A.; Dubrovin, V.F.; Mirovitskiy, D.I.; Smyk, A.F. (MIREA). Fiberoptic device for transmitting the image of an object (its variations). OTIZD, no. 20, 1985, 1158967.
293. Borisov, A.F.; Gurevich, V.Z.; Morozov, S.V.; Sergeyenko, G.N.; Yakovlev, V.I. (EIS). Acoustooptic radio signal spectrum analyzer. OTIZD, no. 21, 1985, 1160328.
294. Both, W. (). Dynamic behavior of optoelectronic elements of lightguide communication lines. CIWKIlme, 29th, Ilmenau, 29 Oct - 2 Nov 1984. Heft 2. Vortragsr. A2, A3. Ilmenau, 1984, 137-139. (RZRAB, 85/5Ye462).
295. Boyko, V.; Stafeyev, A. (project director) (OVIMU). Laser sector beacon. MORSA, no. 5, 1985, 36.

296. Braude, V.B. (). Estimating the level of diffraction losses in a two-layer fiber, allowing for longitudinally extended inhomogeneities. Sistemy i sredstva peredachi informatsii po kanalam svyazi. Leningrad, 1984, 20-25. (RZFZA, 85/6Zh396).
297. Brode, F. (). Device for determining the numerical aperture and refractive index profile of lightguides. Patent GDR, no. 214686, 17 Oct 1984. (RZRAB, 85/6Ye255).
298. Busurin, V.I.; Semenov, A.S.; Udalov, N.P. (MAI). Optical and fiberoptic sensors (review). KVEKA, no. 5, 1985, 901-944.
299. Butusov, M.M.; Gomzin, V.N.; Grodnev, I.I. (). Development of fiberoptic communications. Sistemy i sredstva peredachi informatsii po kanalam svyazi. Leningrad, 1984, 3-7. (RZFZA, 85/6Zh399).
300. Bykovskiy, Yu.A.; Mironos, A.V.; Smirnov, V.L.; Soldatov, V.I. (MIFI). Using the selectivity of dissolution of chalcogenide glassy semiconductor films to form passive elements in integrated optics. KVEKA, no. 6, 1985, 1302-1304.
301. Christall, K.; Kansy, W.; Schulz, U.; Winkler, R. (). Laser text recorder. Patent GDR, no. 214555, 17 Oct 1984. (RZRAB, 85/6Ye586).
302. Churbanov, M.F.; Skripachev, I.V.; Plotnichenko, V.G. (). Chalcogenide glasses with small optical losses for fiber optics. CKAmorFP, Gabrovo, Bulgaria, 17-22 Sep 1984. Sbornik dokladov. Vol. 2. Gabrovo, yr of publ not given, 277-279. (RZRAB, 85/6Ye358).
303. Cvijetic, M. (). Determining the losses in coupling a radiation source with multimode optical fibers. Naucno-tehnicki pregled Vojnotehnicki institut (in Serbian), no. 7, 1984, 3-6. (RZFZA, 85/5L43).
304. Dubinin, A.A.; Stepanova, T.S. (). Device for controlling the quality of performance of a digital signal detector in a fiberoptic communications line. OTIZD, no. 43, 1984, 1125753. (RZRAB, 85/5Ye389).
305. Fasold, D.; Hehl, K.; Mueller, R. (). Decoupling of $Ta_{(sub)2}O_{(sub)5}$ optical waveguides from an absorptive Si substrate through a SiO_2 buffer layer for integrated optics. Beitrage zur Optik und Quantenelektronik. Band 9. CFJOBOQu, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 100-101. (RZRAB, 85/5Ye272).

306. Fritzsche, K. (). Use of lasers in printing. Beitrage zur Optik und Quantenelektronik. Band 9. CFJBOQu, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 56-57. (RZRAB, 85/5Ye625).
307. Gan'shin, V.A.; Bashkin, M.O.; Kubrinskaya, M.E.; Korkishko, Yu.N. (MEI). Diffuse ion exchange formation of lightguides with distributed parameters. MEI. Nauchnyye trudy, no. 19, 1983, 141-145. (RZRAB, 85/6Ye470).
308. Gilev, I.S.; Kondrat'yev, Yu.N.; Safiullina, S.S. (GOI). Effect of the thickness of the cladding and difference in the thermal expansion coefficient of glasses, on the transparency of light guides. OPMPA, no. 6, 1985, 31-34.
309. Goepel, K.; Foerster, G.; Haertig, Th. (). Method for fabricating plug couplers for plastic coated lightguides. Patent GDR, no. 212820, 22 Aug 1984. (RZRAB, 85/6Ye338).
310. Gol'denberg, S.U.; Averichev, Yu.D.; Krumlikova, N.I.; Dmitruk, L.N. (). Method for evaluating the homogeneity of the properties of single-crystal fibers and lightguides based on them. Sovremennyye metody fiziko-khimicheskikh issledovaniy tverdogazovykh reaktsii. Kemerovo, 1984, 59-63. (RZFZA, 85/6Zh398).
311. Grinshteyn, M.L.; Kirillov, V.I.; Mal'tseva, N.V.; Serikov, V.V.; Tkachenko, A.P. (). Transmission of TV signals over fiberoptic communication lines. TKTEA, no. 12, 1984, 24-26. (RZRAB, 85/5Ye416).
312. Gusev, Yu.M.; Makeyev, S.A.; Orobinskiy, S.P. (). Fiberoptic switch. OTIZD, no. 41, 1984, 1123010. (RZRAB, 85/6Ye347).
313. Gutkin, T.I.; Rays, B.G. (GOI). Commutation of a light signal by a direct trapezoidal prism. OPMPA, no. 6, 1985, 59-60.
314. Guzenko, G.A. (GOI). Methodological errors in self-collimated optical communications. OPMPA, no. 7, 1984, 27-30.
315. Il'in, V.G.; Khorenyan, R.G. (TulPI). Losses during graded-index input of radiation into a fiber lightguide. Razrabotka elementov i sistem tekhnicheskoy radiooptiki. TulPI. Tula, 1984, 85-92. (RZFZA, 85/5Zh287).

316. Il'in, V.G.; Melan'ina, T.M.; Remizov, N.V. (). Estimating the distribution of the refractive index in measuring the aberrations of the angular spatial transfer rate of images in graded-index fibers. OPSPA, v. 57, no. 5, 1984, 933-936.
317. Iogansen, L.V.; Pavlovskiy, D.A. (VZITLP). Theory of tunnel prism communications with active optical waveguides. ZTEFA, no. 11, 1984, 2105-2112.
318. Iogansen, L.V.; Turovtsev, A.V. (VZITLP). Theory of prism communications with nonlinear optical waveguides. Difference frequency generation. ZTEFA, no. 11, 1984, 2113-2118.
319. Kazanskiy, P.G. (IOF). Photoinduced conversion of polarization of radiation in lithium niobate elements for integrated optics. IOF. Dissertation, 1985, 18 p.
320. Kebedzhiyev, A.G. (IOF). Optical characteristics of fiber lightguides during automated control of their fabrication. IOF. Dissertation, 1985, 19 p.
321. Khromushin, V.A. (TulPI). Laser frequency trimming in microwave hybrid-integrated-circuit dielectric resonators. Razrabotka elementov i sistem tekhnicheskoy radiooptiki. TulPI. Tula, 1984, 132-145. (RZFZA, 85/5Zh263).
322. Klyachkin, L.Ye.; Lopatina, L.B.; Malyarenko, A.M.; Sukhanov, V.L. (FTI). Photoelectric characteristics of a SiO(subx)--polycrystalline Si-Ge system where x is greater than 1 and less than 2. PZTFD, no. 11, 1985, 675-679.
323. Kozel, S.M.; Listvin, V.N.; Shatalin, S.V. (). Determination of birefringence in single-mode fibers. OPSPA, v. 58, no. 5, 1985, 1159-1161.
324. Krecklow, B. (). Device for adjusting coupled lightguides. Patent GDR, no. 214464, 10 Oct 1984. (RZRAB, 85/6Ye336).
325. Kremez, A.S.; Larin, Yu.T.; Ryazanov, I.B.; Semenov, N.A.; Suchkov, V.F. (MEI). Effect of the complex of external actions on the transmission parameters of optical cables. MEI. Nauchnyye trudy, no. 19, 1983, 185-189. (RZRAB, 85/6Ye292).
326. Kress, D.; Janke, M. (). Analysis of a digital lightguide transmission system. CIWKilme, 29th, Ilmenau, 29 Oct - 2 Nov 1984. Heft 2. Vortragsr. A2, A3. Ilmenau, 1984, 127-132. (RZRAB, 85/5Ye380).

327. Kutasov, V.A.; Mikheyev, P.A.; Sadko, N.P.; Puysha, A.E. (GOI). Effect of nonequilibrium in light transmission of a fiber element on the image contrast. OPMPA, no. 7, 1984, 20-23.
328. Makaretskiy, Ye.A. (TulPI). Study on functional elements of integrated optics. Razrabotka elementov i sistem tekhnicheskoy radiooptiki. TulPI. Tula, 1984, 15-19. (RZFZA, 85/5Zh288).
329. Makkaveyev, V.I.; Mel'nikov, S.Yu. (EIS). Computer modeling of the characteristics of optical fibers with random variation in the refractive index along the length. VINITI. Deposit, no. 1801-85, 13 mar 1985, 11 p. (RZFZA, 85/6L58).
330. Mar'yenkov, A.A.; Perepechko, V.K.; Lukin, V.I.; Uryadov, V.N.; Sinkevich, V.I. (MRI). Device for measuring dispersion distortions in optical cables. OTIZD, no. 47, 1984, 1130756. (RZRAB, 85/6Ye285).
331. Nazarov, V.D.; Fedorov, E.G.; Raab, P.; Lange, I. (). Signals in a linear section of digital fiberoptic communication lines. CIWKIlme, 29th, Ilmenau, 29 Oct - 2 Nov 1984. Heft 2. Vortragsr. A2, A3. Ilmenau, 1984, 145-148. (RZRAB, 85/5Ye371).
332. Nesterov, V.V.; Skoblin, A.A. (SimGU). Study on speckle noise in multimode optical waveguides. ZTEFA, no. 5, 1985, 869-873.
333. Novokhatko, S.M. (). Effect of the temperature of the environment on the characteristics of optical fibers and cables based on them. Elektrotekhnicheskaya promyshlennost'. Kabel'naya tekhnika, no. 12, 1984, 16-20. (RZRAB, 85/5Ye248).
334. Ovilko, O.G.; Artyushin, L.F.; Trus'ko, V.L.; Ionikh, R.A.; Moskalev, B.A. (NIKFI). Device for recording images on motion picture film by laser light sources. OTIZD, no. 21, 1985, 1160356.
335. Padurets, G.I.; Ablyazov, R.A.; Ivanov, V.V.; Katasonov, V.I.; Malov, A.P.; Romanchenko, P.M.; Stepura, V.I.; Belyarov, P.I. (GOI). The FPM-1 photoprinter with a laser light source. OPMPA, no. 5, 1985, 25-27.
336. Petrovic, R. (). Optical fiber line code matched to the HDB3 code (in English). CIWKIlme, 29th, Ilmenau, 29 Oct - 2 Nov 1984. Heft 2. Vortragsr. A2, A3. Ilmenau, 1984, 149-152. (RZRAB, 85/5Ye398).

337. Plagwitz, M. (). Optomechanical switch [for a fiber lightguide]. Patent GDR, no. 211184, 4 Jul 1984. (RZRAB, 85/5Ye300).
338. Pshenitsin, V.I.; Red'ko, V.P.; Starostina, G.P.; Shteyngart, L.M. (IFANBMO). Optical waveguides obtained by irradiating alloyed quartz glasses with helium ions. ZTEFA, no. 5, 1985, 948-951.
339. Rodionov, A.N.; Klimov, I.I. (). Method for determining losses in fiberoptic elements. OTIZD, no. 47, 1984, 1130824. (RZRAB, 85/6Ye250).
340. Semenov, A.B. (MEIS). Effect of change in the shape of the directional pattern of semiconductor radiators on the level of nonlinear noise in analog optical cable communications systems. Informsvyaz'. Deposit, no. 576sv-85, 12 Feb 1985, 10 p. (RZRAB, 85/6Ye171).
341. Semenov, A.B. (MEIS). Method for determining the safety factor for amplitude-modulated optical cable communications systems in terms of the line spread in the amplifier sections. Informsvyaz'. Deposit, no. 577sv-85, 12 Feb 1985, 17 p. (RZRAB, 85/6Ye402).
342. Shashin, V.I.; Gurenko, V.A. (GOI). Obtaining fiberoptic bundles with equalizing illumination along the output end-face. OPMPA, no. 7, 1984, 58-59.
343. Shatalov, F.A. (MFTI). Effect of pressure and tension on the phase of coherent radiation in fiber lightguides. KVEKA, no. 5, 1985, 1086-1089.
344. Shchepakina, K.M.; Aleshin, V.S. (). Effect of the digitization frequency on the accuracy of optical control systems in the presence of noise. Razrabotka elementov i sistem tekhnicheskoy radiooptiki. TulPI. Tula, 1984, 23-26. (RZRAB, 85/6Ye422).
345. Simsa, J. (). Receiver for a 34 Mbit/s fiberoptic digital communication system (in English). CIWKilme, 29th, Ilmenau, 29 Oct - 2 Nov 1984. Heft 2. Vortragsr. A2, A3. Ilmenau, 1984, 141-144. (RZRAB, 85/5Ye479).
346. Sotin, V.Ye. (MEI). Using waveguides with periodic modulation of parameters in integrated optics. MEI. Nauchnyye trudy, no. 19, 1983, 136-141. (RZRAB, 85/6Ye368).

347. Srapionov, V.A. (). Estimating the correctness of the refractive index profile during the development and production of optical fibers. *Sistemy i sredstva peredachi informatsii po kanalam svyazi*. Leningrad, 1984, 26-29. (RZFZA, 85/6Zh397).
348. Trutschel, U. (). Multistability in distributed-feedback waveguides. *Beitraege zur Optik und Quantenelektronik*. Band 9. CFJBOQu, 16th, Jena, 9-11 Jul 1984. *Vortraege. Physik Gesellschaft DDR*. Jena, 1984, 176-177. (RZRAB, 85/5Ye269).
349. Vasil'yev, V.I.; Malezhenkov, V.V. (). Integrated digital communication networks. *Novoye v zhizni, nauke, tekhnike. Radioelektronika i svyaz'*, no. 6, Moskva, Znaniye, 1985, 64 p.
350. Vladimirov, F.L.; Morichev, I.Ye.; Pletneva, N.I. (). The time characteristics of an optically controllable s-effect transparency. *ZTEFA*, no. 5, 1985, 912-913.
351. Yegorov, Yu.V.; Ushakov, V.P. (LETI). Acoustic method for shaping and processing radio signals. *OTIZD*, no. 24, 1985, 745269.
352. Yermakova, N.V.; Urvantseva, N.L. (). Amplitude fiberoptic transducers of acoustic vibrations. *Sistemy i sredstva peredachi informatsii po kanalam svyazi*. Leningrad, 1984, 8-13. (RZFZA, 85/6Pl46).
353. Zamfir, C.A.; Bojeriu, C.A.; Miss, D.G. (). Modulator-demodulator unit [for a fiberoptic data transmission system]. Patent Romania, no. 81416, 28 Feb 1983. (RZRAB, 85/6Ye408).

C. BEAM PROPAGATION

1. Theory

354. Khalturin, V.I. (MGI). Self-consistent two-flow approximation in the transfer theory of radiation. *IFAOA*, no. 6, 1985, 589-597.
355. Klim, B.P.; Pochapskiy, Ye.P.; Fedoriv, R.F. (). Model of a weak light signal. *OTPIA*, no. 72, 1985, 42-44.
356. Kriksunov, L.Z.; Pliyev, A.Ye. (GOI). Refraction of laser beams in a shockwave. *OPMPA*, no. 7, 1984, 1-3.
357. Mityakov, V.G.; Fedorov, V.B. (). Apodization of light beams with a Gaussian intensity distribution. *OPSPA*, v. 58, no. 6, 1985, 1349-1351.

358. Molodtsov, S.N. (GIIVT). Correctness of a geometric optic description of the moments of a lightwave field propagating in a medium with large-scale inhomogeneities. IVYRA, no. 12, 1984, 1530-1535.
359. Myakinin, V.A.; Tikhonova, N.S. (IFA). Effect of thermal self-action on the coherence of pulsed radiation in a homogeneous medium. KVEKA, no. 5, 1985, 1074-1075.
360. Nazarkin, A.V.; Rogov, V.S. (IRE). The propagation of light beams in periodically inhomogeneous dielectric waveguides. ZTEFA, no. 5, 1985, 961-964.
361. Popov, S.P.; Fedorov, G.M. (). Complex structure of two-dimensional thermal waves while absorbing laser radiation. ZVMFA, no. 6, 1985, 946-947.
362. Shepelevich, V.V. (). Equations of coupled waves in optically active media. OPSPA, v. 58, no. 6, 1985, 1366-1368.
363. Yakushkin, I.G. (IFA). Intensity fluctuations in small angle scattering of wave fields (review). IVYRA, no. 5, 1985, 535-565.

2. Propagation in the Atmosphere

364. Akul'shina, L.G.; Pinchuk, S.D. (IEM). Methods for determining meteorological visibility in fog and haze in terms of visibility from the light source. Distantstionnoye zondirovaniye atmosfery. GKGKP. IEM. Trudy, no. 38(121), 1985, 79-83.
365. Banakh, V.A.; Buldakov, V.M.; Mironov, V.L. (). Effect of the spatial coherence of the light source on the intensity distribution of reflected radiation in the focal plane of a telescope. OPSPA, v. 58, no. 1, 1985, 111-115.
366. Bankova, T.V.; Lysenko, B.M.; Rokotyan, V.Ye.; Sheynin, A.B. (). Determining the coefficient of reflection of the surface of the sea by data from pulsed laser probing. Optika okeana i atmosfera. CPRGOOKA, 6th, Baku, 29 Oct - 3 Nov 1979. Materialy. KPMOAN. Baku, 1983, 109-114. (RZGFA, 85/5V48).
367. Belen'kiy, M.S. (). Effect of turbulence on image formation in laser sources and targets. Kogerentnost' lazernogo izlucheniya v atmosfere. IOA. Novosibirsk, Nauka, 1985, 65-84.

368. Belen'kiy, M.S. (). Measurement of turbulent distortions of a field. Kogerentnost' lazernogo izlucheniya v atmosfere. IOA. Novosibirsk, Nauka, 1985, 109-112.
369. Belen'kiy, M.S. (). Medium diffractive rays and phase fluctuations in laser beams. Kogerentnost' lazernogo izlucheniya v atmosfere. IOA. Novosibirsk, Nauka, 1985, 53-65.
370. Belen'kiy, M.S.; Mironov, V.L. (). Coherent properties of laser beams in media with random inhomogeneities. Kogerentnost' lazernogo izlucheniya v atmosfere. IOA. Novosibirsk, Nauka, 1985, 8-33.
371. Belen'kiy, M.S.; Mironov, V.L. (). Distorting action of atmospheric turbulence on laser radiation. Kogerentnost' lazernogo izlucheniya v atmosfere. IOA. Novosibirsk, Nauka, 1985, 4-7.
372. Belen'kiy, M.S.; Mironov, V.L. (). Lidar determination of the intensity of turbulence. Kogerentnost' lazernogo izlucheniya v atmosfere. IOA. Novosibirsk, Nauka, 1985, 134-140.
373. Belen'kiy, M.S.; Mironov, V.L. (). Translucence measurements of the structural characteristics of turbulence. Kogerentnost' lazernogo izlucheniya v atmosfere. IOA. Novosibirsk, Nauka, 1985, 130-134.
374. Belen'kiy, M.S.; Sazanovich, V.M.; Tsvyk, R.Sh. (). Effect of turbulence on image formation from laser sources. OPSPA, v. 58, no. 5, 1985, 1133-1137.
375. Belov, V.V.; Zuyev, V.Ye.; Krekov, G.M. (). Visibility of objects of arbitrary sizes through turbid layers. OPSPA, v. 58, no. 6, 1985, 1351-1355.
376. Bel'ts, V.A.; Volkovitskiy, O.A.; Dobrovol'skiy, A.F.; Ivanov, Ye.V.; Nasedkin, Yu.V.; Pavlova, L.N. (IEM). Experimental study on the action of CO₂ laser pulses on droplet and crystalline cloud media. KVEKA, no. 5, 1985, 1027-1033.
377. Belyakov, G.P.; Osadchiy, V.Yu.; Shifrin, K.S. (). airborne lidar for detecting pollution of the sea surface by petroleum products. Optika okeana i atmosfera. CPRGOOKA, 6th, Baku, 29 Oct - 3 Nov 1979. Materialy. KPMOAN. Baku, 1983, 51-57. (RZGFA, 85/5V78).

378. Birger, Ye.M.; Gurevich, G.S.; Mazurov, I.V.; Kholoptsev, N.N.; Shifrin, K.S. (). Study on petroleum pollutants of the sea surface by spatial filtering of reflected radiation. Optika okeana i atmosfera. CPRGOOKA, 6th, Baku, 29 Oct - 3 Nov 1979. Materialy. KPMOAN. Baku, 1983, 58-66. (RZGFA, 85/5V79).
379. Drofa, A.S.; Usachev, A.L. (IEM). Brightness distribution of scattered light from a point source over an inclined path. IFAOA, no. 6, 1985, 603-608.
380. Drofa, A.S.; Usachev, A.L. (IEM). Light field from a projector window in a cloud medium. Distantstionnoye zondirovaniye atmosfery. GKGGP. IEM. Trudy, no. 38(121), 1985, 63-72.
381. Flyagin, A.V.; Shchegol'kov, Yu.B. (). Possibility of studying the surface sea state by laser probing in the IR. Optika okeana i atmosfera. CPRGOOKA, 6th, Baku, 29 Oct - 3 Nov 1979. Materialy. KPMOAN. Baku, 1983, 95-100. (RZGFA, 85/5V39).
382. Garger, Ye.K.; Zhukov, G.P.; Korshunov, V.A.; Romanov, N.P.; Chalenko, N.I. (IEM). Experimental study on the effect of turbulent agitation on the microphysical characteristics of an aerosol jet in the atmospheric boundary layer. Distantstionnoye zondirovaniye atmosfery. GKGGP. IEM. Trudy, no. 38(121), 1985, 87-100.
383. Kadyshevich, Ye.A. (IFA). Possibility of estimating the parameters of a disperse medium under conditions of multiple light scattering. IFAOA, no. 6, 1985, 598-602.
384. Kaul', B.V.; Krasnov, O.A. (). Using lidars to monitor atmospheric dust. CVSRadme, 6th, Tallin, 20-23 Apr 1982. Trudy. Leningrad, 1984, 300-303. (RZRAB, 85/6Ye702).
385. Kirakosyants, V.Ye.; Loginov, V.A. (). Statistical characteristics of laser signals propagating in a turbulent atmosphere over a reflecting path. RAELA, no. 5, 1985, 860-868.
386. Kolarov, G.; Stoyanov, D.; Ferdinandov, E.; Mitsev, Ts. (). Lidar correlation measurements of the atmospheric drift velocity by single-electron receivers [in English]. Bolgarskiy fizicheskiy zhurnal, no. 6, 1984, 654-662. (RZRAB, 85/6Ye704).

387. Kosterin, A.G.; Saichev, A.I. (GGU). Propagation of a laser beam in a turbulent atmosphere with refraction. Itogovaya nauchnaya konferentsiya Radiofizicheskoy fakul'tet a GGU za 1983 g. Gor'kiy, 2-4 Feb 1984. Materialy. Chast' 1. VINITI. Deposit, no. 1332-85, 20 Feb 1985, 58-66. (RZFZA, 85/5Zh1).
388. Kostko, O.K.; Tulinov, K.V. (GosNITsIPR). Lidar observations of stratospheric aerosols. Eksperimental'nyye issledovaniya atmosfery s pomoshch'yu sredstv kosmicheskoy tekhniki. GKGP. GosNITsIPR. Trudy, no. 21, Leningrad, Gidrometeoizdat, 1985, 85-92.
389. Kostko, O.K.; Tulinov, K.V. (GosNITsIPR). Using spaceborne lasers to determine the gas and aerosol composition of the atmosphere. Eksperimental'nyye issledovaniya atmosfery s pomoshch'yu sredstv kosmicheskoy tekhniki. GKGP. GosNITsIPR. Trudy, no. 21, Leningrad, Gidrometeoizdat, 1985, 59-65.
390. Krikunov, G.A.; Novikov, A.S.; Portasov, V.S. (). Determining the meteorological parameters of the atmosphere by means of a spontaneous Raman scattering lidar. CVSRadme, 6th, Tallin, 20-23 Apr 1982. Trudy. Leningrad, 1984, 290-293. (RZRAB, 85/6Ye700).
391. Lukin, V.P. (). Correlation and structural functions of phase fluctuations. Kogerentnost' lazernogo izlucheniya v atmosfere. IOA. Novosibirsk, Nauka, 1985, 33-37.
392. Lukin, V.P. (). Determining the spectra and scale of turbulence by optical phase measurements. Kogerentnost' lazernogo izlucheniya v atmosfere. IOA. Novosibirsk, Nauka, 1985, 112-115.
393. Lukin, V.P. (). Mode analysis of phase fluctuations. Kogerentnost' lazernogo izlucheniya v atmosfere. IOA. Novosibirsk, Nauka, 1985, 40-47.
394. Lukin, V.P. (). Mutual characteristics of phase fluctuations for spaced optical beams. Kogerentnost' lazernogo izlucheniya v atmosfere. IOA. Novosibirsk, Nauka, 1985, 38-40.
395. Lukin, V.P. (). Phase fluctuations of mirror reflected optical waves. Kogerentnost' lazernogo izlucheniya v atmosfere. IOA. Novosibirsk, Nauka, 1985, 47-53.

396. Lukin, V.P. (). Phase measurements of the scale of turbulence. Kogerentnost' lazernogo izlucheniya v atmosfere. IOA. Novosibirsk, Nauka, 1985, 125-130.
397. Lukin, V.P. (). Probing of turbulence characteristics by measurements in the region of "strong" fluctuations. Kogerentnost' lazernogo izlucheniya v atmosfere. IOA. Novosibirsk, Nauka, 1985, 121-125.
398. Lukin, V.P. (). Reconstruction of the spectrum of refractive index fluctuations in the atmosphere by optical measurements. Kogerentnost' lazernogo izlucheniya v atmosfere. IOA. Novosibirsk, Nauka, 1985, 115-120.
399. Milyutin, Ye.R.; Frezinskiy, B.Ya.; Samel'son, G.M. (EIS). Spatial correlation of randomly displaced light beams in a turbulent atmosphere. IVYRA, no. 5, 1985, 654-656.
400. Milyutin, Ye.R.; Yaremenko, Yu.I. (). Methods for calculating the damping and reliability of atmospheric optical information transmission systems. RATEA, no. 2, 1985, 11-18. (RZRAB, 85/6Ye547).
401. Mironov, V.L. (). Effect of atmospheric distortions on the efficiency of optical systems. Kogerentnost' lazernogo izlucheniya v atmosfere. IOA. Novosibirsk, Nauka, 1985, 140-158.
402. Nokotyan, V.Ye. (). High-resolution laser probing of the shape of reflected pulses. Optika okeana i atmosfera. CPRGOOKA, 6th, Baku, 29 Oct - 3 Nov 1979. Materialy. KPMOAN. Baku, 1983, 108. (RZGFA, 85/5V17).
403. Pelevin, V.N.; Abramov, O.I.; Yerebin, V.I.; Kagayn, V.E.; Karlsen, G.G.; Stemkovskiy, A.I. (). Measuring the parameters of wind waves by laser probing of the sea surface from a helicopter. Optika okeana i atmosfera. CPRGOOKA, 6th, Baku, 29 Oct - 3 Nov 1979. Materialy. KPMOAN. Baku, 1983, 115-116. (RZGFA, 85/5V40).
404. Pinchuk, S.D. (IEM). Experimental study on the dependence of meteorological visibility in optically dense fog on the visibility of the window. Distantсионnoye zondirovaniye atmosfery. GKGP. IEM. Trudy, no. 38(121), 1985, 83-87.
405. Pokasov, V.V. (). Coherence of laser radiation in the atmosphere. Kogerentnost' lazernogo izlucheniya v atmosfere. IOA. Novosibirsk, Nauka, 1985, 88-92.

406. Pokasov, V.V. (). Digital tracking phasometer in the optical range. Kogerentnost' lazernogo izlucheniya v atmosfere. IOA. Novosibirsk, Nauka, 1985, 98-102.
407. Pokasov, V.V. (). Heterodyne detection of optical vibrations. Kogerentnost' lazernogo izlucheniya v atmosfere. IOA. Novosibirsk, Nauka, 1985, 92-95.
408. Pokasov, V.V. (). Methodological fundamentals in interferometer measurements. Kogerentnost' lazernogo izlucheniya v atmosfere. IOA. Novosibirsk, Nauka, 1985, 84-88.
409. Pokasov, V.V. (). Optical heterodyning with harmonic phase modulation of the reference wave. Kogerentnost' lazernogo izlucheniya v atmosfere. IOA. Novosibirsk, Nauka, 1985, 95-98.
410. Pokasov, V.V. (). Phase fluctuations of laser radiation in the atmosphere. Kogerentnost' lazernogo izlucheniya v atmosfere. IOA. Novosibirsk, Nauka, 1985, 102-109.
411. Romanov, N.P.; Shuklin, V.S. (IEM). Geometric optics approach to incoherent backscattering by planar plates. Distantcionnoye zondirovaniye atmosfery. GKGGP. IEM. Trudy, no. 38(121), 1985, 112-117.
412. Romanov, N.P.; Shuklin, V.S. (IEM). Remote determination of the mass concentration of luminescing aerosols. Distantcionnoye zondirovaniye atmosfery. GKGGP. IEM. Trudy, no. 38(121), 1985, 100-108.
413. Shelevoy, K.D. (IOA). High-speed differential pulse discriminator-counter. PRTEA, no. 3, 1985, 105-107.
414. Shifrin, K.S. (). Remote detection of oil slicks on the sea. Optika okeana i atmosfera. CPRGOOKA, 6th, Baku, 29 Oct - 3 Nov 1979. Materialy. KPMOAN. Baku, 1983, 5-19. (RZGFA, 85/5V77).
415. Shuklin, V.S. (IEM). Content of organic matter in precipitations in the central part of European USSR and its residue on the earth's surface. Distantcionnoye zondirovaniye atmosfery. GKGGP. IEM. Trudy, no. 38(121), 1985, 108-112.
416. Tarabukhina, I.M. (LGU). Asymptotics of the reflection and transmission functions of light in a horizontally inhomogeneous layer. IFAOA, no. 5, 1985, 498-506.

417. Usachev, A.L. (IEM). Brightness of scattered light from directionally radiating windows. Distantstionnoye zondirovaniye atmosfery. GKGKP. IEM. Trudy, no. 38(121), 1985, 72-79.
418. Volnistova, L.P.; Drofa, A.S.; Snykov, V.P. (IEM). Effect of the microstructure of fog on the quality of an optical image observed through it. IFAOA, no. 5, 1985, 507-511.
419. Zakharov, Yu.N.; Kosoburd, T.P.; Sorokin, Yu.M. (GGU). Two-wave shadow diagnostics of the ionized component of low-threshold optical breakdown in an aerosol medium. Itogovaya nauchnaya konferentsiya Radiofizicheskoy fakul'teta GGU za 1983 g. Gor'kiy, 2-4 Feb 1984. Materialy. Chast' 2. VINITI. Deposit, no. 1333-85, 20 Feb 1985, 102-105. (RZFZA, 85/5G343).
420. Zakharov, Yu.N.; Sorokin, Yu.M. (GGU). The effect of non-linear refraction on the dynamics and limiting parameters of an extended optical breakdown ZTEFA, no. 5, 1985, 874-880.
421. Zhuravlev, V.F.; Kashentsev, B.P.; Kostko, O.K.; Kushnir, V.D.; Tulinov, K.V. (GosNITsIPR). Automated lidar for probing stratospheric aerosols. Eksperimental'nyye issledovaniya atmosfery s pomoshch'yu sredstv kosmicheskoy tekhniki. GKGKP. GosNITsIPR. Trudy, no. 21, Leningrad, Gidrometeoizdat, 1985, 93-98.
422. Zurabyan, A.Z.; Tibilov, A.S.; Yakovlev, V.A. (). Determining the statistical characteristics of a random surface by optical ranging. OPSPA, v. 57, no. 6, 1984, 1066-1069.
423. Zuyev, V.V.; Marichev, V.N.; Mitsel', A.A. (). Lidar differential absorption probing of atmospheric humidity. CVSRadme, 6th, Tallin, 20-23 Apr 1982. Trudy. Leningrad, 1984, 303-304. (RZRAB, 85/6Ye703).

3. Propagation in Liquids

424. Afonin, Ye.I. (). Small-angle laboratory photometer for hydrooptic studies. Optika okeana i atmosfera. CPRGOOKA, 6th, Baku, 29 Oct - 3 Nov 1979. Materialy. KPMOAN. Baku, 1983, 363-368. (RZGFA, 85/5V57).
425. Akopyan, R.S.; Zel'dovich, B.Ya. (). Natural convection in liquids due to absorption of laser radiation. PMAMA, no. 4, 1985, 685-688.

426. Antipin, G.V.; Bannikov, M.T.; Vagin, A.A.; Lemberskiy, V.B.; Tyagin, V.G.; Fishkin, R.V.; Popov, K.A. (VNIKIKhMDz). Device for forming liquid drops. OTIZD, no. 23, 1985, 411703.
427. Avetisyan, V.M.; Atanesyan, V.G.; Melik-Sarkisyan, A.A.; Nazaryan, A.A.; Oganessian, A.T.; Oganessian, R.G.; Dadivanyan, A.K.; Ninoyan, Zh.O.; Oganessian, R.O.; Parparov, A.S. (SKTBAerazol'; YeGU). Study on the possibility of using laser fluorescence for quantitative determination of organic matter and chlorophyll in Lake Sevan. IAAFA, no. 3, 1985, 166-170.
428. Chernyak, A.Sh.; Levin, I.M. (). Measuring the indices of light absorption and scattering by the IPSH-1 instrument. Optika okeana i atmosfera. CPRGOOKA, 6th, Baku, 29 Oct - 3 Nov 1979. Materialy. KPMOAN. Baku, 1983, 381. (RZGFA, 85/5V59).
429. Devyatkov, A.G.; Polyakov, Ye.V.; Solodkov, A.F. (). Laser equipment for hydrooptic studies. Optika okeana i atmosfera. CPRGOOKA, 6th, Baku, 29 Oct - 3 Nov 1979. Materialy. KPMOAN. Baku, 1983, 368. (RZGFA, 85/5V58).
430. Ivanov, A.P.; Kalinin, I.I.; Kolesnik, A.I. (). Use of lasers in oceanographic research. Optika okeana i atmosfera. CPRGOOKA, 6th, Baku, 29 Oct - 3 Nov 1979. Materialy. KPMOAN. Baku, 1983, 293. (RZGFA, 85/5V19).
431. Ivanov, A.P.; Katsev, I.L.; Kolesnik, A.I. (). Light pulse broadening, allowing for double scattering. Optika okeana i atmosfera. CPRGOOKA, 6th, Baku, 29 Oct - 3 Nov 1979. Materialy. KPMOAN. Baku, 1983, 173-180. (RZGFA, 85/5V52).
432. Kovalenko, L.G.; Goncharov, E.G. (). Effect of light scattering while recording fluctuations in the refractive index of seawater. Optika okeana i atmosfera. CPRGOOKA, 6th, Baku, 29 Oct - 3 Nov 1979. Materialy. KPMOAN. Baku, 1983, 133. (RZGFA, 85/5V49).
433. Mazurov, I.V.; Fadeyev, V.V.; Chubarov, V.V. (). Laser diagnostics of petroleum products and dissolved organic matter in water. Optika okeana i atmosfera. CPRGOOKA, 6th, Baku, 29 Oct - 3 Nov 1979. Materialy. KPMOAN. Baku, 1983, 20-27. (RZGFA, 85/6V47).
434. Vasilenko, V.V.; Sidorenko, V.M. (). Quantitative analysis of impurities in seawater from remote spectral measurements. Optika okeana i atmosfera. CPRGOOKA, 6th, Baku, 29 Oct - 3 Nov 1979. Materialy. KPMOAN. Baku, 1983, 116. (RZGFA, 85/5V80).

4. Adaptive Optics

435. Afanas'yev, A.A.; Zhvavyy, S.P. (IFANB, IEANBel). Resonant four-wave interaction in a pumping wave field of arbitrary intensity. KVEKA, no. 6, 1985, 1248-1253.
436. Antsiperov, V.Ye. (MFTI). Using Bayes' approach to an adaptive optics problem. Nauchnaya konferentsiya MFTI, 9th, Dolgoprudnyy, 25 May 1984. VINITI. Deposit, no. 8182-84, 20 Dec 1984, 51-55. (DERUD, 4/85, 78).
437. Apanasevich, P.A.; Afanas'yev, A.A.; Kilin, S.Ya.; Samson, B.A. (IFANB). Noncoplanar accompanying four-wave interaction in resonantly absorbing media. IFANB. Preprint, no. 349, 1984, 42 p. (RZFZA, 85/5L1118).
438. Artamonov, N.N.; Dimov, N.A.; Zhmakin, D.G.; Kiselev, G.L.; Kozlov, S.N.; Kuznetsov, V.V.; Pechenov, A.S. (GOI). Study on phase-conjugational optical systems. OPMPA, no. 12, 1984, 3-5.
439. Arutyunyan, V.M.; Aramyan, A.R.; Ishkhanyan, S.P.; Papazyan, T.A. (NIIFKS). Study on nondegenerate four-wave wavefront reversal in three-level resonant media. IAAFA, no. 3, 1985, 139-146.
440. Bondarenko, S.V.; Ivakin, Ye.V.; Kabelka, V.I.; Mikhaylov, A.V.; Rubanov, A.S. (IFANB). Study on wavefront reversal in organic dye solutions in a picosecond light pulse field. KVEKA, no. 5, 1985, 1107-1109.
441. Dimov, N.A.; Korniyenko, A.A.; Mal'tsev, G.N.; Pechenov, A.S. (GOI). Study on the quality of the spatial approximation of a wavefront under zonal mode correction. OPMPA, no. 6, 1985, 1-3.
442. Filinov, V.N.; Chernyy, G.P. (). Problem of reconstruction of extended object images under partially coherent illumination. OPSPA, v. 58, no. 6, 1985, 1330-1334.
443. Kukhtarev, N.V. (IFANUK). Anisotropic self-diffraction in photorefractive gyrotropic crystals. IFANUK. Preprint, no. 8, 1985, 24 p.
444. Kusimov, S.T.; Krasner, Yu.G.; Smolenkov, V.F.; Tagirov, V.R.; Radin, A.G. (). Use of the reciprocity principle in wavefront correction problems. SEPTD, no. 11, 1983, 126-129. (RZFZA, 85/5L6).

445. Lazaruk, A.M. (). Possibility of transmitting images through phase inhomogeneous media by spatial modulation of inverted waves. VBSFA, no. 6, 1984, 58-63. (RZFZA, 85/6L1090).
446. Loginov, V.A.; Antsiperov, V.Ye. (MFTI). Allowing for quantum noise in adaptive focusing of optical radiation. KVEKA, no. 5, 1985, 1009-1016.
447. Matveyev, A.Z. (IPF). Noise in four-wave hypersonic reversing mirrors under absolute instability. KVEKA, no. 6, 1985, 1184-1190.
448. Pimenov, Yu.D.; Kuzilin, Yu.Ye.; Sintsov, V.N.; Sitnik, N.A. (GOI). Holographic corrector in an objective with a composite main mirror. OPMPA, no. 7, 1984, 23-26.
449. Sukhorukov, A.P.; Timofeyev, V.V.; Trofimov, V.A. (MGU). Compensation of nonlinear distortions in light beams by aberrational mirrors. IVYRA, no. 12, 1984, 1514-1524.
450. Sukhorukov, A.P.; Timofeyev, V.V.; Trofimov, V.A. (MGU). Nonlinear distortions of tubular beams in a moving medium. VMUFA, no. 3, 1985, 55-58.
451. Vasil'yev, M.V.; Sidorovich, V.G. (). Quality of wavefront reversal of a lightwave with the plane component selected by intensity. OPSPA, v. 58, no. 6, 1985, 1378-1380.
452. Vlad, V.I.; Ostrovskaya, G.V.; Dabu, R.V.; Koval'chuk, Yu.V.; Sokolov, I.A.; Smol'skiy, O.V. (). Conjugate wavefront generation in amorphous silicon (in English). Central Institute of Physics, Romania. Reports, no. LOP 41, 1983, 8 p. (RZFZA, 85/6L1086).
453. Yepishin, V.A.; Zaslavskiy, V.Ya.; Neofitnyy, M.V.; Przhrevskiy, S.S. (KhGU). Method for measuring the curve of the phase front of a beam of electromagnetic radiation. OTIZD, no. 42, 1984, 1124180. (RZRAB, 85/5Ye530).
454. Yepishin, V.A.; Zaslavskiy, V.Ya.; Neofitnyy, M.V. (). Properties of diffraction images in nonperiodic transparencies. OPSPA, v. 58, no. 5, 1985, 1194-1196.

D. COMPUTER TECHNOLOGY

455. Aksenov, Ye.T.; Leonov, Ye.I.; Lipovskaya, M.Yu. (LPI). An investigation of an integrated optical element of a holographic memory. PZTFD, no. 9, 1985, 546-549.
456. Bondarev, Ye.F.; Bystrov, Ye.M.; Dombrovskiy, V.V.; Isayev, V.I.; Tyatenkov, V.K.; Yakovlev, V.P. (ITK). Device for spatial scanning of light beams. PRTEA, no. 3, 1985, 225.
457. Bukatova, I.L.; Golik, L.L.; Yelinson, M.I.; Perov, P.I.; Sharov, A.M. (IRE). Optoelectronic device for calculating binary logic functions of multiple variables. OTIZD, no. 24, 1985, 805815.
458. Chayka, A.N.; Subbotin, F.M.; Vladimirov, F.L.; Morichev, I.Ye.; Pletneva, N.I. (). Space-time light modulator based on a chalcogenide glassy semiconductor--liquid crystal structure for inputting information into coherent optical processors. COSOZhKr, 3rd, Moskva, Apr 1983. Materialy. GOI. Leningrad, 1984, 93-97. (RZFZA, 85/5L686).
459. Kazakevich, V.V.; Yefimov, M.V. (). Analysis of signal conversion in laser information processing systems. Priborostroyeniye i avtomaticheskii kontrol'. No. 2. Lazernyye ustroystva i ikh primeneniye. Moskva, Mashinostroyeniye, 1985, 112-178.
460. Kusch, S.; Minor, U.C. (). Digital optical storage. Beitrage zur Optik und Quantenelektronik. Band 9. CFJOBOQu, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 16-19. (RZFZA, 85/6L685).
461. Vaneyev, G.G. (MVTU). Lensless coherent optical processor using wavelength scaling holographic elements. MVTU. Trudy, no. 426, 1984, 11-19. (RZFZA, 85/5L685).

F. HOLOGRAPHY

462. Bablumyan, A.S.; Morozov, V.N.; Putilin, A.N.; Shermergor, T.D. (FIAN). Optimization of recording in waveguide focusing gratings. KRSFA, no. 11, 1984, 42-46. (RZRAB, 85/6Ye737).
463. Bablumyan, A.S.; Morozov, V.N.; Putilin, A.N. (FIAN). Study on routines for recording waveguide holograms in two-layer waveguides. KRSFA, no. 11, 1984, 56-59. (RZFZA, 85/5Zh242).

464. Bakut, P.A.; Mandrossov, V.I.; Nekrasov, A.I. (GOI). Detection of nonplanarity of surfaces by their coherent images. OPMPA, no. 6, 1985, 10-12.
465. Barmenkov, Yu.O.; Kozhevnikov, N.M.; Sergushchenko, S.A. (LPI). An experimental determination of the amount of mismatch of a light-induced grating and of the interference pattern in a NBS-Se crystal. PZTFD, no. 11, 1985, 649-652.
466. Burmistrov, Yu.P.; Ostrovoy, Yu.D. (KPIA). Method for recording double-exposure holographic interferograms. OTIZD, no. 19, 1985, 1157348.
467. Dorosh, I.R. (). Preservability of holograms in $\text{LiNbO}_3\text{:Fe}$ crystals. Problemy fiziki materialov elektronnoy tekhniki (Problems of the physics of materials in electronic engineering). LvPI. UkrNIINTI. Deposit, no. 19Uk-85, 3 Jan 1984, 53-60. (RZFZA, 85/5Ye7).
468. Gal'pern, A.D. (). Number of semitones in an image observed under coherent illumination. OPSPA, v. 58, no. 6, 1985, 1335-1340.
469. Gal'pern, A.D.; Yermolayev, M.M.; Kalinina, I.V.; Selyavko, L.V.; Smayev, V.P. (GOI). Study on the possibility of obtaining relief phase holograms on silver halide photomaterials. OPMPA, no. 5, 1985, 4-5.
470. Kavtrev, A.F.; Ratner, O.V.; Lashkov, G.I. (). Method for obtaining three-dimensional phase holograms. OTIZD, no. 17, 1985, 1154644.
471. Klimenko, I.S.; Ryabukho, V.P.; Feduleyev, B.V. (MFTI). The "branching" effect of interference bands upon the superposition of identical speckle fields. ZTEFA, no. 5, 1985, 980-983.
472. Kuvshinskiy, N.G.; Nakhodkin, N.G.; Barabash, Yu.M. (). Specific noise in thermoplastic media (in English). Journal fuer Signalaufzeichnungsmaterialien, no. 6, 1984, 359-376. (RZRAB, 85/5Ye770).
473. Mazurenko, Yu.T. (). Recording and reconstruction of ultrashort pulses by interference of spectrally decomposed light. KVEKA, no. 6, 1985, 1235-1241.
474. Nalimov, I.P.; Antonov, V.M. (NIKFI). Lined focusing holographic screens. TKTEA, no. 5, 1985, 18-23.

475. Reynfelde, M.Ya.; Ozols, A.O.; Shvarts, K.K. (). Volume holographic gratings and self-amplification processes in LiNbO_3 -Fe crystals. LZFTA, no. 6, 1984, 88-96. (RZFZA, 85/5L757).
 476. Shepelevich, V.V. (MoGPI). Mutual transformation of electromagnetic waves in volume holograms, allowing for gyrotropy in the recording medium in the recording stage. ZTEFA, no. 11, 1984, 2177-2183.
 477. Stashkevich, I.V.; Chaley, A.V. (BGU). Diffraction efficiency and line profile of thin phase holograms. VBMFA, no. 3, 1985, 19-22.
 478. Trofimov, G.S.; Stepanov, S.I. (FTI). Photorefractive $\text{Bi}(\text{sub}12)\text{TiO}(\text{sub}20)$ crystal for holographic interferometry at 0.63 μm . PZTFD, no. 10, 1985, 615-621.
 479. Zeylikovich, I.S.; Karnaukhov, N.V.; Platonov, Ye.M.; Spornik, N.M. (). Methods for compensation of hologram substrates. OPSPA, v. 58, no. 6, 1985, 1387-1390.
 480. Zhdanovich, S.N.; Kovalev, A.A. (). Erasure of holographic recording on photothermoplastic media by infrared solid-state laser radiation. VBSFA, no. 6, 1984, 80-84. (RZFZA, 85/6L746).
- F. LASER-INDUCED CHEMICAL REACTIONS
481. Akramova, D.Sh.; Alimov, D.T.; Medvedeva, V.K.; Tursunov, M.A.; Khabibullayeva, P.K. (). Study on the process of multiphoton ionization of alkali-earth atoms. Nelineynyie protsessy v dvukhelektronnykh atomakh. Moskva, 1984, 48-68. (RZFZA, 85/5L134).
 482. Akramova, D.Sh.; Alimov, D.T.; Medvedeva, V.K.; Preobrazhenskiy, M.A.; Khabibullayev, P.K. (IYaFANUz). Study on the process of nonlinear ionization of barium atoms by YAG laser radiation. IYaFANUz. Preprint, no. R-9-104, 1983, 24 p. (RZFZA, 85/6L156).
 483. Alimov, D.T.; Medvedeva, V.K.; Tursunov, M.A.; Khabibullayev, P.K. (). Polarization dependence of three-photon ionization of barium and calcium atoms. OPSPA, v. 58, no. 6, 1985, 1201-1203.

484. Alimpiyev, S.S.; Zikrin, B.O.; Karlov, N.V.; Mokhnatyuk, A.A.; Nikiforov, S.M.; Pashinin, P.P.; Sartakov, B.G.; Smirnov, V.V.; Fabelinskiy, V.I. (IOF). Rate of inter-isotope vibrational energy exchange of $(\text{sup}32)\text{SF}(\text{sub}6)$ and $(\text{sup}34)\text{SF}(\text{sub}6)$ molecules. PZTFD, no. 21, 1984, 1319-1321.
485. Alkhazov, G.D.; Panteleyev, V.N.; Berlovich, E.Ye.; Peau, E.W. (W.Germany); Blinnikov, Yu.S.; Polyakov, A.G.; Denisov, V.P.; Sergeyev, Yu.Ya.; Derschel, K. (W.Ger); Tikhonov, V.I.; Heddrieh, W.; Wagner, H.; Huehnermann, H. (W.Ger). (LIYaF). Nuclear moments and changes of nuclear charge radii of samarium and europium isotopes measured with collinear laser ion beam spectroscopy at the IRIS mass-separator. LIYaF. Preprint, no. 1004 (in English), 1984, 57 p. (RZFZA, 85/5V111).
486. Arutyunyan, A.G.; L'vov, K.M.; Mnatsakanyan, A.O.; Oganesyan, V.A.; Shakhnazaryan, N.V. (). Two-quantum photoionization of aromatic amino acids. CSSPSpek, 3rd, Minsk, 28-30 Sep 1983. Materialy. Minsk, 1984, 143-147. (RZFZA, 85/5L352).
487. Bagratashvili, V.N.; Kuz'min, M.V.; Letokhov, V.S.; Stuchebryukhov, A.A. (ISAN). Theory of multiphoton IR excitation of polyatomic molecules in a model of active and passive modes of the vibrational reservoir. ISAN. Preprint, no. 10, 1984, 99 p. (RZFZA, 85/6D263).
488. Baydullayeva, A.; Korsunskaya, N.Ye.; Mozol', P.Ye.; Polisskiy, G.N. (IPANUK). Effects connected with variation in the stoichiometric composition of $\text{Zn}(\text{sub}x)\text{Cd}(\text{sub}1-x)\text{Se}$ solid solution crystals under the effect of laser irradiation. IANFA, no. 6, 1985, 1153-1156.
489. Benimetskaya, L. (IAESOAN). Electrophoretic analysis method. OTIZD, no. 6, 1984, 1073681.
490. Bondar', I.I.; Gomonay, A.I.; Suran, V.V. (). Experimental study on multiphoton ionization of barium atoms. Nelineynyye protsessy v dvukhelektronnykh atomakh. Moskva, 1984, 25-46. (RZFZA, 85/5L135).
491. Bunkin, F.V.; Galaktionov, V.A.; Kirichenko, N.A.; Kurdyumov, S.P.; Samarskiy, A.A. (IOF; IPM). Qualitative methods in the physics of laser heating of metals in the atmosphere. IANFA, no. 6, 1985, 1046-1053.

492. Bunkin, F.V.; Kirichenko, N.A.; Luk'yanchuk, B.S. (IOF). Bifurcations, catastrophes and structures in laser thermochemistry. IANFA, no. 6, 1985, 1054-1068.
493. Gall', L.N.; Turkina, M.Ya. (IAP). Possibilities of mass-spectrum analysis of nonvolatile and thermally instable bioorganic compounds. USKHA, v. 54, no. 5, 1985, 741-764.
494. Gaysak, M.I.; Zatsarinnyy, O.I.; Lend'yel, V.I.; Petrina, D.M.; Shuba, I.M. (). Multiphoton ionization of atoms with two-valence electrons. Nelineynyye protsessy v dvukhelektronnykh atomakh. Moskva, 1984, 115-136. (RZFZA, 85/5L133).
495. Hertz, J.; Weidsuer, R. (). Short-time pyrolysis of polyamide and polyester fibers under UV laser pulses. Beitrage zur Optik und Quantenelektronik. Band 9. CFJOBOQu, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 129-130. (RZRAB, 85/5Ye705).
496. Ioffe, V.B.; Dolgolaptev, A.V.; Aleksandrov, V.Ye.; Obraztsov, A.P. (). Combustion of condensed systems containing aluminum by single-pulsed laser radiation. FGVZA, no. 3, 1985, 51-55.
497. Karule, E.M. (). Two-photon ionization of excited states of the hydrogen atom above the photoionization threshold. Nelineynyye protsessy v dvukhelektronnykh atomakh. Moskva, 1984, 209-235. (RZFZA, 85/5L138).
498. Lakhtin, Yu.M.; Kogan, Ya.D.; Tarasova, T.V. (). Study on laser doping of corrosion-resistant steel. EOBMA, no. 3, 1985, 28-31.
499. Lisichenko, V.I.; Chernay, A.V. (). Analysis of the effect of crack formation on combustion of explosives by laser radiation. FGVZA, no. 3, 1985, 51-55.
500. Mak, A.A.; Ryl'kov, V.V.; Cheshev, Ye.A. (GOI). Stroboscopic device for pulsed laser photolysis. OPMPA, no. 12, 1984, 32-33.
501. Makarov, G.N. (). Separation of osmium isotopes by high-power CO2 laser pulses. Stabil'nyy izotop osmiy-187 v nauchnykh issledovaniyakh. Alma-Ata, Nauka, 1984, 67-72. (RZFZA, 85/6V407).
502. Mamyrin, B.A. (FTI). Control of pyroprocesses in nonferrous metallurgy by systems developed at the A.F. Ioffe Physicotechnical Institute, Academy of Sciences USSR. VANSa, No. 5, 1985, 62-66

503. Pokatashkin, V.I.; Boykov, V.N.; Kuleshov, N.V.; Krasovskiy, A.N. (NIIPFP). Photochemical transitions in sodium uranyl acetate crystals. DBLRA, no. 5, 1985, 418-420.
 504. Preobrazhenskiy, M.A. (). Single-electron multiphoton ionization of alkali-earth metal atoms. Nelineynnye protsessy v dvukhelektronnykh atomakh. Moskva, 1984, 69-90. (RZFZA, 85/5L129).
 505. Vetsko, V.M.; Devdariani, O.A.; Kalitin, S.A.; Kaminskiy, V.A.; Laguntsov, N.I.; Sulaberidze, G.A. (). Cascading of laser isotope separators. KVEKA, no. 6, 1985, 1254-1260.
 506. Yevseyev, A.V.; Puretskiy, A.A. (ISAN). Increasing the selectivity and output during IR multiphoton dissociation of molecules in multifrequency IR laser fields. KVEKA, no. 5, 1985, 1050-1054.
 507. Zorov, N.B.; Kuzyakov, Yu.Ya.; Novodvorskiy, O.A.; Chaplygin, V.I.; Volchkov, I.V. (MGU). Method for laser atomic ionization analysis. OTIZD, no. 18, 1985, 1155919.
- G. MEASUREMENT OF LASER PARAMETERS
508. Aleksandrov, M.L.; Asinovskiy, L.M.; Mel'tsin, A.L. (). Device for determining the polarization parameters of pulsed radiation. OTIZD, no. 47, 1984, 1130777. (RZRAB, 85/6Ye549).
 509. Aleksandrov, Yu.V.; Bliznyuk, V.V.; Sharikhin, V.F. (). Wide-aperture wideband device for power-stabilization in medium-power lasers. Impul'snaya fotometriya: lazernaya izlucheniye, metody izmereniy, fotopriyemniki, metrologiya, no. 8. GOI. Leningrad, 1984, 60-62. (Tochnyye izmereniya i kvantovaya elektronika, no. 36, 1985, 782).
 510. Belousov, A.V.; Dvoretzkiy, S.A.; Zaytsev, L.M.; Morozov, Yu.B.; Pospelova, L.A.; Semenov, A.K. (). Luminescent device for recording the power density distribution of IR radiation. Elektrovakuum. pribory dlya metrol. obespech. bystroprotekayushch. protsessov. Moskva, 1984, 15-23. (RZFZA, 85/5L1052).

511. Blabla, J.; Bartos, M.; Smydke, J.; Weber, T.; Hantke, D.; Philipp, H.; Sommer, M.; Tschirnich, J. (). Comparison of standards for frequency-stabilized He-Ne/I(sub2) lasers at the metrological organizations of East Germany and Czechoslovakia. Metrologische Abhandlungen, v. 3, no. 4, 1983, 285-290. (Tochnyye izmereniya i kvantovaya elektronika, no. 36, 1985, 778).
512. Bukovskiy, B.L.; Tomashevskiy, Yu.F.; Arkhipov, V.V.; Kiselev, B.A. (GOI). Wideband instrument for proximate measurement of c-w tunable laser wavelengths. OPMPA, no. 5, 1985, 27-31.
513. Burnashev, M.N.; Krylov, P.S.; Mironov, A.V.; Privalov, V.Ye. (). Device for measuring laser wavelengths. OTIZD, no. 24, 1985, 1122088.
514. Dashevskiy, B.Ye.; Dmitrenko, S.S.; Lazarev, M.D.; Ushakov, V.K.; Chayko, Yu.V.; Shchelev, M.Ya. (FIAN). Wideband deflecting system for subpicosecond electrooptic transducers. Pikosekundnaya elektronno-opticheskaya diagnostika v lazernykh isledovaniyakh. FIAN. Trudy, no. 155, 1985, 173-177.
515. Degtyareva, V.P.; Platonov, V.N. (FIAN). Nonlinear model of the formation of an electron image in a picosecond electrooptic transducer. Pikosekundnaya elektronno-opticheskaya diagnostika v lazernykh isledovaniyakh. FIAN. Trudy, no. 155, 1985, 159-164.
516. Fomin, V.V. (IRE). Vibrational-rotational transitions of the OsO(sub4) molecule and their use in frequency stabilized CO2 lasers. IRE. Dissertation, 1985, 23 p. (Tochnyye izmereniya i kvantovaya elektronika, no. 36, 1985, 771).
517. Gase, R.; Schubert, M. (). Spectral-time characteristics of laser pulses and their measurement. Beitrage zur Optik und Quantenelektronik. Band 9. CFJBOQu, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 106-107. (RZRAB, 85/5Ye527).
518. Geschke, S.; Rempel, Ch.; Schlawatzky, H.; Steffan, J. (). Correlation measurement of ultrashort light pulses. Beitrage zur Optik und Quantenelektronik. Band 9. CFJBOQu, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 114-116. (RZFZA, 85/6L1026).

519. Goncharov, I.G.; Grachev, A.P.; Dedushenko, K.B.; Likhachev, I.G.; Mamayev, A.N. (MIFI). Device for determining the structure of a light beam. OTIZD, no. 19, 1985, 1157363.
520. Gorbunkov, M.V.; Degtyareva, V.P.; Platonov, V.N.; Prokhorov, A.M.; Shchelev, M.Ya. (FIAN). Time response of a picosecond electrooptic transducer. Pikosekundnaya elektronno-opticheskaya diagnostika v lazernykh isledovaniyakh. FIAN. Trudy, no. 155, 1985, 165-172.
521. Horn, G.; Schubert, D.; Schwarz, J. (). Correlation measuring methods to determine the pulse parameters of synchronously pumped dye lasers. EXPPA, no. 5, 1984, 439-448. (RZFZA, 85/6L1025).
522. Khurkhulu, Yu.S. (). Reducing the divergence of semiconductor laser radiation by optical resonance antennas (resonant angular filters). Razrabotka elementov i sistem tekhnicheskoy radiooptiki. TulPI. Tula, 1984, 11-15. (RZFZA, 85/6L1015).
523. Kulikov, Yu.V.; Monastyrskiy, M.A.; Ushakov, V.K.; Shchelev, M.Ya. (FIAN). Theory and calculation of the time aberrations in cathode lenses. Pikosekundnaya elektronno-opticheskaya diagnostika v lazernykh isledovaniyakh. FIAN. Trudy, no. 155, 1985, 146-158.
524. Luekmemann, B. (). Measurements of a frequency-stabilized two-mode internal-mirror laser. Beitrage zur Optik und Quantenelektronik. Band 9. CFJOBOQu, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 144-146. (RZRAB, 85/5Ye556).
525. Nikol'skiy, Yu.N.; Zubarev, V.I. (). Power stabilization system for the LG-66 gas laser. Razrabotka elementov i sistem tekhnicheskoy radiooptiki. TulPI. Tula, 1984, 69-75. (RZFZA, 85/6L1044).
526. Platonov, V.N.; Ushakov, V.K. (FIAN). Linear scan rate in picosecond electrooptic transducers for measuring the duration of a deflecting electric field front compared with time-of-flight. Pikosekundnaya elektronno-opticheskaya diagnostika v lazernykh isledovaniyakh. FIAN. Trudy, no. 155, 1985, 229-232.

527. Postovalov, V.Ye.; Serdyuchenko, Yu.N. (FIAN). Development and dynamic testing of picosecond electrooptic cameras. Pikosekundnaya elektronno-opticheskaya diagnostika v lazernykh isledovaniyakh. FIAN. Trudy, no. 155, 1985, 178-193.
528. Prokhorov, A.M.; Chebokin, V.K.; Shchemelev, V.N. (FIAN). Photocathodes for picosecond x-ray electrooptic transducers. Pikosekundnaya elektronno-opticheskaya diagnostika v lazernykh isledovaniyakh. FIAN. Trudy, no. 155, 1985, 212-228.
529. Prokhorov, A.M.; Shchelev, M.Ya. (FIAN). Cooperation with foreign companies in picosecond electrooptic diagnostics. Pikosekundnaya elektronno-opticheskaya diagnostika v lazernykh isledovaniyakh. FIAN. Trudy, no. 155, 1985, 233-240.
530. Shchelev, M.Ya. (FIAN). Picosecond electrooptic diagnostics in laser research. Pikosekundnaya elektronno-opticheskaya diagnostika v lazernykh isledovaniyakh. FIAN. Trudy, no. 155, 1985, 3-145.
531. Tumanova, L.A.; Tarkhov, N.S. (). System for automatic measurement of the wavelength of laser radiation. Razrabotka elementov i sistem tekhnicheskoy radioopotiki. TulPI. Tula, 1984, 26-29. (RZFZA, 85/6L1021).
532. Vasil'yev, P.P.; Morozov, V.N.; Pak, G.T.; Popov, Yu.M.; Sergeyev, A.B. (FIAN). Measuring the frequency shift in a picosecond pulse of a mode-locked injection laser. KVEKA, no. 6, 1985, 1297-1299.
533. Vasil'yeva, M.A.; Vishchakas, Yu.; Gul'binas, V.; Kabelka, V.; Masalov, A.V.; Syrus, V. (IFANLI). Measuring the nonlinear refractive index of laser active media with Nd³⁺. KVEKA, no. 5, 1985, 997-1001.
534. Vodop'yanov, K.L.; Vorob'yev, N.S.; Kulevskiy, L.A.; Prokhorov, A.M.; Shchelev, M.Ya. (FIAN). Electrooptic recording of picosecond pulses from an actively mode-locked erbium laser at 2.94 μ m. Pikosekundnaya elektronno-opticheskaya diagnostika v lazernykh isledovaniyakh. FIAN. Trudy, no. 155, 1985, 208-211.

535. Vysogorets, M.V.; Lozovoy, V.I.; Petrov, M.Yu.; Platonov, V.N.; Prokhorov, A.M.; Shchelev, M.Ya. (FIAN). Image reader for a picosecond electrooptic measuring system using charge-coupled-device matrices. Pikosekundnaya elektronno-opticheskaya diagnostika v lazernykh isledovaniyakh. FIAN. Trudy, no. 155, 1985, 194-199.
536. Yelfimov, O.V.; Kremenchugskiy, L.S.; Levash, L.V. (GOI). Determining the parameters of a laser beam by a quadrant microelectric radiation detector. OPMPA, no. 6, 1985, 56-58.

H. LASER MEASUREMENT APPLICATIONS

1. Direct Measurement by Laser

537. Alekho, A.; Marti, L.; Moreno, A.; Ostrovskiy, Yu.I.; Serra, R. (FTI). The dependence of the useful diffraction halo in two-exposure speckle-photographs on the form of recording. ZTEFA, no. 6, 1985, 1105-1109.
538. Aleksandrov, A.L.; Zhdan, A.G.; Lipovskaya, L.A.; Mitrokhin, A.V.; Ponomarev, A.N.; Prikhod'ko, V.G.; Tatarinov, V.I. (IRE). Multipurpose automated optical scanning microscope. PRTEA, no. 3, 1985, 228-229.
539. Andreyev, Ye.P.; Baulin, N.N.; Biryukov, A.M.; Grenkov, V.L.; Daushvili, A.M.; Yermakov, D.S.; Kuvalkin, D.G.; Lyutomskiy, V.A.; Orlova, I.N.; Pilyugin, N.N.; Sagaydachnyy, Yu.M.; Taganov, O.K.; Trufanov, A.S. (IMMGU). Radiometric instruments for optical studies under ballistic path conditions. PRTEA, no. 3, 1985, 155-158.
540. Artemenko, S.B.; Ignat'yev, A.G.; Khopov, V.V. (ChPI). Optical sensors for measuring displacements. ZVDLA, no. 6, 1985, 82-84.
541. Asnis, L.N.; Blatov, I.V.; Moskalenko, A.V.; Popov, Yu.V.; Remizov, S.A. (). Heterodyne optical rangefinder method for measuring distances. KVEKA, no. 6, 1985, 1318-1319.
542. Baehr, J.; Drabner, M. (). Construction of a holographic measuring site for studying gas/solid flows in dust control. Beitrage zur Optik und Quantenelektronik. Band 9. CFJOBOQu, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 82-83. (RZRAB, 85/5Ye756).

543. Baehr, J.; Schwind, A.E. (). Bubble chamber holography. Beitrage zur Optik und Quantenelektronik. Band 8. CFJBOQu, 15th, Karl-Marx-Stadt, 11-14 Apr 1983. Vortraege. East Berlin, 1983, 92-93. (RZRAB, 85/5Ye757).
544. Bagir-zade, F.M. (AzGU). Using optical holography in prospecting for oil and gas deposits. DAZRA, no. 6, 1985, 50-53.
545. Bajic, B. (). Reconstruction of the instrument function of an analyzer of size distribution of spherically symmetrical particles by laser scattering. Construction of a mathematical model. Naucno-tehnicki pregled Vojnotehnicki institut (in Serbian), no. 7, 1984, 30-37. (RZFZA, 85/6L79).
546. Bakut, P.A.; Kuznetsov, M.V.; Mandrossov, V.I. (). Statistical characteristics of coherent images of nonplanar objects. ZNPFA, no. 3, 1985, 161-166.
547. Beketova, A.K.; Skochilov, A.F.; Skochilova, I.A. (GOI). Study on band luminosity in laser mirror interferometers. OPMPA, no. 12, 1984, 12-14.
548. Bekker, A.M.; Bukhtoyarova, N.I.; Tombak, M.A. (LIYaF). Spatial resolution of holographic track detectors. LIYaF. Preprint, no. 1014, 1984, 31 p. (RZFZA, 85/5V441).
549. Belenov, E.M.; Bykovskiy, A.Yu.; Kroo, N.; Luskinovich, P.N.; Szentirmay, Zs. (Sentirmay, Zh.); Soboleva, Ye.M.; Sobolev, A.G.; Uskov, A.V. (FIAN). Luminescence directional pattern of a metal-barrier-metal diode. KVEKA, no. 5, 1985, 1110-1112.
550. Belov, I.A.; Litvinov, V.M. (TsAGI). Visualization of eddy zones of currents by a stroboscopic laser "knife". UZTAA, no. 2, 1985, 88-92.
551. Belov, N.N.; Motyagin, V.A.; Negin, A.Ye. (). Method for measuring the concentration of solid aerosol particles. OTIZD, no. 23, 1985, 705849.
552. Belyy, M.U.; Zelenskiy, S.Ye.; Okhrimenko, B.A.; Yablochkov, S.M. (KGU). Optical recording carrier. OTIZD, no. 35, 1984, 1115099. (RZRAB, 85/5Ye566).
553. Berezhnoy, A.A.; Sherstneva, T.N. (). Optical information recording in transparent ferroelectric ceramics. OPSPA, v. 58, no. 6, 1985, 1323-1329.

554. Bespalov, Yu.I.; Shakhov, S.I.; Vereshchagin, S.G. (). Laser directional indicator with a liquid compensator. Issledovaniya tochnosti izmereniy v marksheydersko-geodezicheskikh rabotakh. Leningrad, 1984, 53-56. (RZGAB, 85/5.52.307).
555. Bodner, V.A.; Zastrogin, Yu.F. (). Various aspects in using lasers in measuring instruments. Priborostroyeniye i avtomaticheskii kontrol'. No. 2. Lazernyye ustroystva i ikh primeneniye. Moskva, Mashinostroyeniye, 1985, 44-111.
556. Bogoboyashchiy, V.V.; Yelizarov, A.I.; Ivanov-Omskiy, V.I.; Petrenko, V.R.; Petryakov, V.A. (FTI). Kinetics in the process of bringing $Cd(x)Hg(1-x)Te$ crystals into equilibrium with mercury vapor. FTTPA, no. 5, 1985, 819-824.
557. Brodskiy, I.A.; Gusev, O.N.; Zaytsev, B.I.; Rudyavskaya, I.G.; Stanevich, A.Ye.; Stepanenkov, I.N. (GOI). Tunable Fabry-Perot interferometer in the far infrared. OPMPA, no. 5, 1985, 22-25.
558. Butusov, M.M.; Yermakova, N.V.; Urvantseva, N.L. (MEI). Fiberoptic pressure sensors. MEI. Nauchnyye trudy, no. 19, 1983, 169-177. (RZRAB, 85/6Ye443).
559. De, S.T.; Denezhkin, Ye.N.; Khandogin, V.A. (). Using Moire interference bands to detect defects. DEFKA, no. 12, 1984, 35-44. (RZRAB, 85/6Ye742).
560. Dmitriyev, A.V.; Zak, Ye.A. (). Computer modeling of fiberoptic transducers with coaxial lightguides. OPSPA, v. 58, no. 1, 1985, 184-187.
561. Doroshchuk, V.S.; Yatsenko, E.K.; Mardar', V.Ya.; Omel'yanenko, A.D.; Volotskiy, A.A. (UkrNIISI). Device for controlling deviations from coaxial alignment of two apertures of relatively general axis. OTIZD, no. 20, 1985, 1158861.
562. Drichko, N.M.; Golubeva, S.G.; Anishchenko, V.V.; Leykin, M.V. (GOI). Polarimeter for determining the parameters of spatially inhomogeneous optical anisotropy. OPMPA, no. 6, 1985, 28-30.
563. Dubovikova, Ye.A.; Dubovikov, M.S. (). Refraction in optical interferometry. OPSPA, v. 58, no. 6, 1985, 1300-1303.
564. Farakhutdinova, M.A.; Suleymanov, N.T. (GOI). Evaluating the work capacity of fiberoptic transducers. OPMPA, no. 7, 1984, 14-16.

565. Fayner, N.I.; Shemetov, Ye.V.; Zamozhskiy, V.D.; Rumyantsev, Yu.M.; Kuznetsov, F.A. (INKh). Determining the surface microrelief characteristics of crystals during their dissolution or growth from the gas phase. KRISA, no. 3, 1985, 542-547.
566. Fedoseyev, V.B.; Uzhov, N.V.; Denisov, A.Yu. (MVTU). Determination of distance in a coherent optical ranging system. MVTU. Trudy, no. 426, 1984, 57-62. (RZFZA, 85/5L1234).
567. Genkin, S.A.; Kozyrev, A.V.; Korolev, Yu.D.; Tipchurin, K.A. (ISE). Tepler shadow measurement of the electron concentration at the inception stage of a spark channel during contraction of a nanosecond volume discharge. ZTEFA, no. 6, 1985, 1216-1218.
568. Georgobiani, A.N.; Kalinushkin, V.P.; Mikulenok, A.V.; Murin, D.I.; Prokhorov, A.M.; Radautsan, S.I.; Tigiyanu, I.M.; Ursaki, V.V. (IOF). Aggregate of electrically active impurities in indium phosphide single crystals. FTPPA, no. 5, 1985, 810-813.
569. Glushko, A.I. (). Interaction of a sleeve- or cylinder-shaped percussive device and a cylindrical target. IZMTB, no. 3, 1985, 179-183.
570. Golovina, A.P.; Ivanova, I.M.; Ivanov, V.M.; Nesterenko, P.N. (MGU). Detecting gold(I) from intrinsic luminescence. ZAKHA, no. 5, 1985, 810-813.
571. Golyanskaya, L.M.; Yakovleva, Ye.N.; Chekanova, T.G.; Khalevskiy, V.Z.; Pron'kin, V.S. (). Photoelectric device for controlling deviations from the surface rectilinearity of an object. OTIZD, no. 18, 1985, 1155847.
572. Gonor, A.L.; Zubin, M.A.; Ostapenko, N.A. (). Use of lasers in experimental aerodynamics. Priborostroyeniye i avtomaticheskii kontrol'. No. 2. Lazernyye ustroystva i ikh primeneniye. Moskva, Mashinostroyeniye, 1985, 5-43.
573. Gorodetskiy, A.N.; Arist, L.M.; Lyakhovetskiy, L.S.; Krupman, Yu.G.; Druyan, V.M.; Sil'chenko, A.A. (Ukrqiprometz). Device for aligning the axis of a multicellular mill. OTIZD, no. 23, 1985, 668142.
574. Gorshkov, B.G.; Kutakhov, V.P.; Sen'ko, V.V.; Khatin, G.A.; Yaremchuk, V.A. (). Fiberoptic linear acceleration sensors. RATEA, no. 1, 1985, 83-85. (RZFZA, 85/5Zh286).

575. Gupalov, V.I. (LPI). Transducer for high-voltage measurements. OTIZD, no. 24, 1985, 1164612.
576. Gusev, V.G.; Balandin, S.F. (GOI). Speckle interferometric measurement of the curvature of spherical mirrors. OPMPA, no. 6, 1985, 40-43.
577. Harnisch, B. (). Optical phase measurements by sinusoidal phase modulation. Beitrage zur Optik und Quantenelektronik. Band 9. CFJOBOQu, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 123-124. (RZRAB, 85/5Ye546).
578. Haubenreisser, W.; Lehmann, J.; Perthel, R.; Willsch, R. (). Study on fiberoptic refractometry. EXPPA, no. 6, 1984, 519-530. (RZFZA, 85/6L727).
579. Il'inskaya, T.A.; Kazak, V.L. (LITMO). Method for determining the polarization state of object waves. OTIZD, no. 20, 1984, 1053625. (RZRAB, 85/6Ye745).
580. Iogansen, L.V.; Uvarov, F.A. (). Multimode fiber interferometers. OPSPA, v. 58, no. 5, 1985, 1106-1110.
581. Ivanov, V.N.; Ivanov, S.V.; Kel'balikhanov, B.F.; Klimova, L.G.; Trubnikov, B.N.; Chernyy, V.V.; Elisashvili, D.T. (VZMI). Measuring the temperature variations and salinity of water by a fiberoptic sensor. IFAOA, no. 5, 1985, 555-557.
582. Kampf, R.; Kugler, G. (). Use of optical digital image processing in textile engineering. Beitrage zur Optik und Quantenelektronik. Band 8. CFJOBOQu, 15th, Karl-Marx-Stadt, 11-14 Apr 1983. Vortraege. East Berlin, 1983, 60-63. (RZRAB, 85/5Ye631).
583. Kask, N.Ye.; Leksina, Ye.G.; Fedorov, G.M.; Chopornyak, D.B. (NIIYaF). Dynamics of measuring the refractive index of K8 glass during quick heating and cooling. FKSTI, no. 3, 1985, 331-337.
584. Kiril'chik, T.F.; Plekhanov, G.O. (). Study on radiooptic systems for controlling nonrectilinearity. Razrabotka elementov i sistem tekhnicheskoy radiooptiki. TulPI. Tula, 1984, 19-23. (RZRAB, 85/6Ye570).
585. Klimkov, Yu.M. (). Laser reference systems with constant and variable focusing. IVZAA, no. 6, 1984, 118-122. (RZGAB, 85/5.52.304).

586. Koehler, W. (). method for improving surface resolution-in-depth of photooptic measuring and imaging. Patent GDR, no. 211648, 18 Jul 1984. (RZRAB, 85/6Ye614).
587. Kucherenko, I.A.; Malets, A.V.; Ravich, V.N.; Oleynik, V.I. (). Semiconductor laser study on time lag in the LFD-2 avalanche photodiode at 0.8-1.3 μ m. Impul'snaya fotometriya: lazernaya izlucheniye, metody izmereniy, fotopriyemniki, metrologiya, no. 8. GOI. Leningrad, 1984, 165-166. (Tochnyye izmereniya i kvantovaya elektronika, no. 36, 1985, 742).
588. Kul'chin, Yu.N.; Smirnova, A.S. (DalPI). Interferometry of small displacements using a multimode light guide. ZTEFA, no. 5, 1985, 942-945.
589. Kurbatov, L.N.; Ovchinnikov, I.M.; Soroko-Novitskiy, N.V. (). Interference method for measuring the lifetime of carriers in semiconductors. UFZHA, no. 6, 1985, 920-924.
590. Lebedev, V.B.; Stepanov, B.M.; Syrtsev, V.N.; Fel'dman, G.G. (GOI). Method for measuring the spacing of optically transparent periodic structures. OPMPA, no. 7, 1984, 45-46.
591. Lebedev, V.B.; Syrtsev, V.I.; Fel'dman, G.G. (). Method for measuring the geometric parameters of microchannel and fiberoptic plates. Elektrovakuum. pribory dlya metrolog. obespecheniya bystroprotekayushch. protsessov. Moskva, 1984, 64-66. (RZFZA, 85/5L656).
592. Lisitsyn, V.M.; Shtan'ko, V.F.; Yakovlev, V.Yu. (ToPI). Cathodoluminescent pulsed light sources. ZTEFA, no. 6, 1985, 1187-1188.
593. Litvinov, Yu.V.; Malets, Ye.B.; Samokish, S.A.; Sergeyev, V.N.; Soloshenko, I.I.; Tubayev, V.M. (KhGPI). Device for measuring internal friction in solids. ZVDLA, no. 5, 1985, 38-40.
594. Marti, L.; Ostrovskiy, Yu.I.; Serra, R. (FTI). Lateral displacement of speckle structure in two-lens optical systems. ZTEFA, no. 5, 1985, 929-931.
595. Mokhov, A.V.; Nefedov, A.P. (IVTAN). Determining the concentration of additives in a plasma of combustion products using resonance fluorescence. TVYTA, no. 3, 1985, 620-621.

596. Naumov, V.V.; Kalugin, Yu.N. (). Widespread modifications of hydrooptic instruments for measuring refractive index gradients. Optika okeana i atmosfera. CPRGOOKA, 6th, Baku, 29 Oct - 3 Nov 1979. Materialy. KPMOAN. Baku, 1983, 355. (RZGFA, 85/5V55).
597. Nikolayev, V.M.; Kotov, O.I. (MEI). Use of fiber lightguides in measuring devices. MEI. Nauchnyye trudy, no. 19, 1983, 158-168. (RZRAB, 85/6Ye430).
598. Ovod, V.I.; Shlyuko, V.Ya. (GOI). Correcting the characteristics of laser microparticle analyzers, allowing for nonuniformity in the density distribution of the radiation beam. OPMPA, no. 5, 1985, 8-10.
599. Parusimov, V.G.; Polyanskiy, A.V.; Bepal'ko, N.V. (GAO). Interferometer for determining linear displacements of an object. OTIZD, no. 17, 1985, 1154526.
600. Passia, H.; Pawlak, J.; Piasecki, S.; Smola, T.; Zawadzki, Z. (). Laser anemometer for mining. Patent Poland, no. 125835, 30 Apr 1984. (RZRAB, 85/6Ye629).
601. Pavlov, B.A.; Pavlov, I.V.; Shuvalova, T.M. (). Standard balance. OTIZD, no. 19, 1985, 1157359.
602. Petrov, G.D.; Mekhannikov, A.I. (). Metrological problems in plasma diagnostics. Aktual'nyye problemy metrologii v radioelektronike. Moskva, Izdatelstvo standartov, 1985, 169-202.
603. Pilipko, D.D. (KGU). Multibeam interference ellipsometer. OTIZD, no. 19, 1985, 1157416.
604. Pokrovskiy, Yu.A. (). Improving the efficiency of industrial radiooptic systems based on a comprehensive use of resonance devices with angular selectivity. Razrabotka elementov i sistem tekhnicheskoy radiooptiki. TulPI. Tula, 1984, 3-17. (RZRAB, 85/6Ye568).
605. Przewlocki, S. (). Laser measuring instruments for geodetic applications in industrial construction. Vermessungstechnik, no. 9, 1984, 302-303. (RZGAB, 85/5.52.306).

606. Reichel, W.; Rudolph, F.; Ruediger, G. (). Holographic lithography by an argon laser. Beitrage zur Optik und Quantenelektronik. Band 9. CFJOBOQu, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 156-157. (RZRAB, 85/5Ye758).
607. Rinkevichyus, B.S.; Markov, P.I.; Tolkachev, A.V.; Vasil'yev, A.V.; Chebunin, V.G. (MEI). Use of lightguides in laser Doppler anemometers and industrial measurements. MEI. Nauchnyye trudy, no. 19, 1983, 178-184. (RZRAB, 85/6Ye424).
608. Rozenshteyn, A.; Frishman, F. (). Two-component laser Doppler anemometer for sea studies. ETFMB, no. 4, 1984, 454-456. (RZGFA, 85/5V27).
609. Rozenshteyn, V.B.; Gershenson, Yu.M.; Il'in, S.D.; Kishkovich, O.P.; Malkhasyan, R.T. (IKhF). Study on HO(sub2) radical reaction using a combined EPR/LMR spectrometer. Surface damage. KNKTA, no. 3, 1985, 536-542.
610. Rubinov, Yu.A. (). Basic properties of multibeam interferometers coupled in series, with Lummer-Herke side input. OPSPA, v. 58, no. 5, 1985, 1138-1141.
611. Smol'skiy, I.L.; Malkin, A.I.; Kuznetsov, Yu.G.; Chernov, A.A.; Gussak, Ya.D.; Kogan, A.Ya.; Rozhanskiy, V.N. (IKAN). Laser interference x-ray topographic spectrometer for studying the growth of crystal faces from solution. KRISA, no. 3, 1985, 570-574.
612. Strel'tsova, N.N.; Usova, V.M. (). Determining the optical characteristics of zinc oxide films by integrated optics. Fizika mikroelektronnykh priborov. MIET. Moskva, 1984, 17-22. (RZFZA, 85/6L37).
613. Tatarenkov, V.M. (). Stabilized lasers and their role in metrology. Aktual'nyye problemy metrologii v radioelektronike. Moskva, Izdatelstvo standartov, 1985, 62-81.
614. Tibilov, A.S.; Yakovlev, V.A. (). Determining the characteristics of random fields of dielectric permittivity from optical measurements under multiple scattering conditions. Optika okeana i atmosfera. CPRGOOKA, 6th, Baku, 29 Oct - 3 Nov 1979. Materialy. KPMOAN. Baku, 1983, 349. (RZGFA, 85/5V54).

615. Tychinskiy, V.P.; Zhernovoy, S.A. (MIREA). Critical orientational fluctuations in nematic liquid crystals near a Fredricks transition. PZTFD, no. 12, 1985, 740-744.
616. Ukhlinov, G.A.; Karimov, F.Ch.; Markov, F.V.; Reznikov, B.L. (GOI). Film anisotropic radiation sensors. OPMPA, no. 6, 1985, 50-52.
617. Vannik, A.M.; Kolesnikov, A.P.; Lukin, A.A.; Nazarenko, G.I.; Pavlyuk, I.M.; Yarema, D.I. (). Methods and instruments for laser nondestructive control. Priborostroyeniye i avtomaticheskii kontrol'. No. 2. Lazernyye ustroystva i ikh primeneniye. Moskva, Mashinostroyeniye, 1985, 229-249.
618. Volkov, V.N.; Volkov, V.A. (). Development of radiooptic systems to measure aperture diameters. Razrabotka elementov i sistem tekhnicheskoy radiooptiki. TulPI. Tula, 1984, 29-35. (RZRAB, 85/6Ye569).
619. Voronin, Yu.M.; Shchetnev, Yu.F.; Rakhov, A.V. (GOI). Cathode-luminescent screen consisting of a fiberoptic plate for an electron microscope. OPMPA, no. 5, 1985, 55-56.
620. Voytsekhovskiy, V.N.; Nikolayeva, V.P.; Belevtseva, L.I.; Sidorova, Ye.A. (GOI). Optical quality sodium nitrate crystals grown from an aqueous solution. KRISA, no. 3, 1985, 618-620.
621. Vyacheslavov, L.N.; Kruglyakov, E.P.; Meshkov, O.I.; Khil'chenko, A.D.; Tsidulko, Yu.A. (IYaFSOAN). System for recording laser scattering on the Gol-1 device. IYaFSOAN. Preprint, no. 148, 1984, 10 p. (RZFZA, 85/6G197).
622. Yegorov, V.K.; Merhavka, V.K. (MIFI). Method for measuring resonance absorption in a gas. OTIZD, no. 18, 1985, 1155869.
623. Zatovskaya, A.A. (OGMI). Scattering of light by particles suspended in a Poiseuille flow of a liquid. UFZHA, no. 5, 1985, 707-712.
624. Zhdanova, L.A.; Serebryakov, V.A.; Yashin, V.Ye. (). Intensity and phase transformation of a lightwave by multilayer interference dielectric coatings. OPSPA, v. 58, no. 5, 1985, 1102-1105.

625. Zuyev, A.P. (). Interpretation of laser schlieren measurements of vibrational relaxation times in gas mixtures. KHFID, no. 3, 1985, 363-366. (RZFZA, 85/6I34).

2. Laser-Excited Optical Effects

626. Aktsipetrov, O.A.; Akhmediyev, N.N.; Baranova, I.M.; Mishina, Ye.D.; Novak, V.P. (MGU). Multilayer Langmuir films for optical electronics and a nonlinear optical method for investigating them. PZTFD, no. 10, 1985, 599-601.
627. Aleksakhin, I.S.; Zagrebin, S.B.; Zapesochnyy, I.P.; Ozolin'sh, D.A.; Samson, A.V.; Shafran'osh, I.I. (). Tunable laser study on stepped electron-impact excitation of metal atoms in crossed beams. CSYuMSFV. Trudy. Leningrad, 1984, 74-77. (RZRAB, 85/6Ye643).
628. Alekseyev, V.V.; Loskutov, A.Yu. (MGU). Destochastization of a system with a strange attractor by means of parametric excitation. VMUFA, no. 3, 1985, 40-44.
629. Ashmontas, S.; Shirmulis, E. (IFPV; IFANLi). Study on heating-up holes in germanium with CO₂ laser radiation. IANFA, no. 6, 1985, 1162-1165.
630. Atutov, S.N.; Yermolayev, I.M.; Shalagin, A.M. (IAESOAN). Photoinduced current in a rarefied gas. IAESOAN. Preprint, no. 249, 1984, 8 p. (RZFZA, 85/5G349).
631. Aver'yanova, M.Yu.; Koval'chuk, Yu.V.; Pogorel'skiy, Yu.V.; Smol'skiy, O.V. (). Dynamics in the reflection coefficient of crystalline Si and GaAs under the action of picosecond laser pulses. PZTFD, no. 12, 1985, 761-765.
632. Baltrameyunas, R.; Zalishchevskiy, A.; Kuokshtis, E.; Styapankyavichus, V.; Tamulaytis, G. (VilGU). Effect of exciton-exciton interactions on the polarization properties of luminescence in CdSe single crystals under strong excitation. FTVTA, no. 5, 1985, 1478-1482.

633. Becker, W.; Eickhoff, K.D.; Popetschiz, W.; Schubert, D.; Wabnitz, H. (). Time-correlated single photon counting based on synchronously pumped dye lasers. Measuring system and its use for measuring relaxation times of molecules in solution. Beitrage zur Optik und Quantenelektronik. Band 9. CFJBOQu, 16th, Jena, 9-11 Jul 1984. Vortraege Physik Gesellschaft DDR. Jena, 1984, 86-87. (RZRAB, 85/5Ye547).
634. Beterov, I.M.; Fateyev, N.V.; Chebotayev, V.P. (ITF). The ionization diagnostics of the densities of laser-induced electron transfer molecular beams. PZTFD, no. 11, 1985, 645-648.
635. Boettcher, E.H.; Schmidt, W.F. (). Charge carrier generation in solid xenon by two-photon absorption. PSSBB, v. B126, no. 2, 1984, K165-K169. (RZFZA, 85/5N414).
636. Boyko, M.S. (). Generalized dynamic problem of thermoelasticity for a half-space heated by laser radiation. PMAMA, no. 3, 1985, 470-475.
637. Danishevskiy, A.M.; Perlin, Ye.Yu. (GOI). Photoinduced gyrotropy coupled with spin density fluctuations of free electrons in semiconductors. ZFPRA, v. 41, no. 10, 1985, 426-429.
638. Dubetskiy, B.Ya. (). Theory of photoinduced drift. ZETFA, v. 88, no. 5, 1985, 1586-1599.
639. Gnatenko, Yu.P.; Zhirko, Yu.I.; Gavaleshko, N.P.; Babi, P.I. (). Possibility of forming electron-hole drops by neutral acceptors in CdTe crystals. FTVTA, no. 11, 1984, 3431-3433. (RZFZA, 85/5N414).
640. Goede, O.; Heimbrodt, W.; Thong Dang Dinh (). Nonexponential ZnS:Mn luminescence decay due to energy transfer. PSSBB, v. B126, no. 2, 1984, K159-K163. (RZFZA, 85/5L518).
641. Gorlova, I.G.; Karabanov, A.Yu.; Koledov, V.V.; Monosov, Ya.A.; Pyurbeyev, A.D. (MFTI). Recording optical information on heterogeneous photosensitive media containing magnetic dielectrics in a pulsed magnetic field. Nauchnaya konferentsiya MFTI, 25 May 1984. Trudy. VINITI. Deposit, no. 8182-84, 27 Dec 1984, 37-45. (RZRAB, 85/5Ye564).

642. Karlov, N.V.; Laguchev, A.S.; Petrov, Yu.N.; Prokhorov, A.M.; Yakubova, M.A. (IOF). Observation of a potential well in the absorption of molecules by a solid surface in a resonant laser radiation field. ZFPRA, v. 41, no. 9, 1985, 384-386.
643. Karpovich, I.A.; Kolosov, Ye.Ye.; Leonov, Ye.I.; Orlov, V.M.; Shilova, M.V. (GIFTI). Photoconductivity of bismuth silicate single crystals doped with Mn, Ni, and Cr. IVNMA, no. 6, 1985, 965-967.
644. Kazanskiy, P.G.; Prokhorov, A.M.; Chernykh, V.A. (IOF). Direct detection of a circular photocurrent in lithium niobate. ZFPRA, v. 41, no. 9, 1985, 370-372.
645. Kholodenkov, L.Ye.; Makhanev, A.G.; Kaminskiy, A.A. (). One- and two-photon luminescence excitation of Eu^{3+} in a LaF_3 single crystal. PSSBB, v. B126, no. 2, 1984, 659-667. (RZFZA, 85/5L523).
646. Korobov, V.A.; Pazderskiy, V.A. (TashGU). Effect of laser illumination on intrinsic absorption of light in crystals. TashGU. Sbornik nauchnykh trudov, no. 686, 1982, 22-25. (RZFZA, 85/5L389).
647. Korshunov, V.V.; Lebedev, M.V.; Lysenko, V.G. (IFTT). Changes in the optical properties of CdS crystals under conditions of high-power optical excitation. FTVTA, no. 5, 1985, 1518-1523.
648. Kozlovskiy, S.I.; Moin, M.D. (IPANUK). Transverse photoelectromotive force arising in germanium from extreme levels of laser excitation. FTPPA, no. 5, 1985, 864-868.
649. Kreyngol'd, F.I.; Lider, K.F. (LGU). Population inversion of exciton sublevels at $n=1$ in the yellow series of Cu^{2+} in a magnetic field. ZFPRA, v. 41, no. 12, 1985, 514-516.
650. Kurova, I.A.; Ormont, N.N.; Podrugina, V.D.; Chitaya, K.B. (MGU). Temperature quenching of photoconductivity in undoped $\alpha\text{-Si:H}$ films. VMUPA, no. 3, 1985, 96-98.
651. Lerner, I.B.; Luk'yanovskiy, P.S. (IOF). The stimulated temperature scattering of laser radiation in a dielectric medium with an exothermic reaction. FTBPA, no. 5, 1985, 858-863.

652. Livshits, M.G.; Polikarpov, I.V. (). Resonant action of laser radiation on diffraction of Moessbauer gamma quanta in thin molecular crystals. VINITI. Deposit, no. 8088-84, 18 Dec 1984, 6 p. (RZFZA, 85/5V85).
653. Minogin, V.G.; Rozhdestvenskiy, Yu.V. (ISAN). Coherent trapping of atomic populations in problems of resonant light pressure. ZETFA, v. 88, no. 6, 1985, 1950-1957.
654. Mityagin, Yu.A.; Murzin, V.N.; Stoklitskiy, S.A. (FIAN). Submillimeter luminescence in CdS single crystals under optical pumping. KRSFA, no. 5, 1985, 28-31.
655. Nguyen Vinh Quang (). Quasi-energy spectrum of semiconductors with direct band gaps in a laser field. CZYPA, v. B35, no. 1, 1985, 86-94. (RZFZA, 85/6N362).
656. Osipov, Yu.V. (LETI). Interaction of electromagnetic radiation with matter. VINITI. Deposit, no. 1748-85, 11 Mar 1985, 94 p. (RZFZA, 85/6A175).
657. Penkin, N.P.; Gorshkov, V.N.; Komarovskiy, V.A. (). Radiation lifetimes of La I excited levels. KRSFA, v. 58, no. 6, 1985, 1371-1372.
658. Pod'yachev, S.P.; Shalagin, A.M. (IAESOAN). Diffuse-drawing in and ejection of particles in a light beam in the presence of an intermediate metastable level. IAESOAN. Preprint, no. 241, 1984, 18 p. (RZFZA, 85/5L1185).
659. Pologrudov, V.V.; Karnaukhov, Ye.N. (IGU). Mechanism of the internal photoeffect in alkali-halide crystals under impurity excitation. FTVTA, no. 5, 1985, 1380-1387.
660. Telegin, G.G. (). Drift of molecules under multiquantum excitation. OPSPA, v. 58, no. 5, 1985, 1034-1037.
661. Travnikov, V.V.; Krivolapchuk, V.V. (FTI). Spectral criteria for estimating the lifetimes of free excitons. FTTPA, no. 6, 1985, 1092-1099.
662. Tursunov, A.T.; Eshkobilov, N.B. (). Dye laser excitation of gallium atom Rydberg states and their ionization by an electric field. OPSPA, v. 58, no. 5, 1985, 969-999.

663. Vaynskiy, Yul'iy Ilyich, et al. "Spectral Properties of Tinted Polymers." *Polym. Sci. Ser. A*, 27, no. 10 (VIIGU), 1985, 1770-1774. (Russian) (English transl. in *Polym. Sci. Ser. A*, 27, no. 10, 1985, 1770-1774.)
664. Vaynskiy, Yul'iy Ilyich, et al. "Spectral Properties of Tinted Polymers." *Polym. Sci. Ser. A*, 27, no. 10 (VIIGU), 1985, 1770-1774. (Russian) (English transl. in *Polym. Sci. Ser. A*, 27, no. 10, 1985, 1770-1774.)
665. Vaynskiy, Yul'iy Ilyich, et al. "Spectral Properties of Tinted Polymers." *Polym. Sci. Ser. A*, 27, no. 10 (VIIGU), 1985, 1770-1774. (Russian) (English transl. in *Polym. Sci. Ser. A*, 27, no. 10, 1985, 1770-1774.)
666. Vaynskiy, Yul'iy Ilyich, et al. "Spectral Properties of Tinted Polymers." *Polym. Sci. Ser. A*, 27, no. 10 (VIIGU), 1985, 1770-1774. (Russian) (English transl. in *Polym. Sci. Ser. A*, 27, no. 10, 1985, 1770-1774.)
667. Vaynskiy, Yul'iy Ilyich, et al. "Spectral Properties of Tinted Polymers." *Polym. Sci. Ser. A*, 27, no. 10 (VIIGU), 1985, 1770-1774. (Russian) (English transl. in *Polym. Sci. Ser. A*, 27, no. 10, 1985, 1770-1774.)
668. Vaynskiy, Yul'iy Ilyich, et al. "Spectral Properties of Tinted Polymers." *Polym. Sci. Ser. A*, 27, no. 10 (VIIGU), 1985, 1770-1774. (Russian) (English transl. in *Polym. Sci. Ser. A*, 27, no. 10, 1985, 1770-1774.)
669. Vaynskiy, Yul'iy Ilyich, et al. "Spectral Properties of Tinted Polymers." *Polym. Sci. Ser. A*, 27, no. 10 (VIIGU), 1985, 1770-1774. (Russian) (English transl. in *Polym. Sci. Ser. A*, 27, no. 10, 1985, 1770-1774.)
670. Vaynskiy, Yul'iy Ilyich, et al. "Spectral Properties of Tinted Polymers." *Polym. Sci. Ser. A*, 27, no. 10 (VIIGU), 1985, 1770-1774. (Russian) (English transl. in *Polym. Sci. Ser. A*, 27, no. 10, 1985, 1770-1774.)
671. Vaynskiy, Yul'iy Ilyich, et al. "Spectral Properties of Tinted Polymers." *Polym. Sci. Ser. A*, 27, no. 10 (VIIGU), 1985, 1770-1774. (Russian) (English transl. in *Polym. Sci. Ser. A*, 27, no. 10, 1985, 1770-1774.)
672. Baranovskiy, E.; Baranovskiy, I.; Tarasovskiy, I.; Zerkovskiy, A. "Sample-dependent Luminescence Spectra of Highly Photoexcited CdS and CdSe." *PSSBb*, 1, B126, no. 2, 1984, K135-K138. (DEFA, 85.6N4013.)
673. Baranovskiy, V.S.; Malashonok, V.A.; Nechaev, S.V.; Puko, P.A.; Shedenkov, S.I. (IFANP; FEBI). "Nanosecond intracavity spectroscopy in dye lasers." *DBLPA*, no. 6, 1985, 515-518.

674. Devyatykh, G.G.; Zasavitskiy, I.I.; Kosichkin, Yu.V.; Maksimov, G.A.; Nadezhdinskiy, A.I.; Prokhorov, A.M.; Stepanov, Ye.V.; Tishchenko, A.Yu.; Khomutov, A.Yu.; Shotov, A.P.; Shchapir, S.M. (). Using a diode laser spectrometer to determine the $\text{BCl}(\text{sub}3)$ content in $\text{GeCl}(\text{sub}4)$. PZTFD, no. 10, 1985, 595-599.
675. Dmitrik, G.N.; Korotkov, P.A.; Padchenko, P.S. (). Evidence of the energy transfer effect in the Raman spectrum of $\text{LiNbO}_3(\text{sub}3)$ -Fe crystals. OPSPA, v. 58, no. 6, 1985, 1355-1357.
676. Dorl'nitsyna, O.A.; Kidyarov, B.I.; Polivanov, Yu.N. (FIAN). Raman scattering by polaritons in potassium bromate crystals. KRSFA, no. 6, 1985, 21-25.
677. Drapak, I.T. (ChGU). Ultraviolet photoluminescence of zinc oxide excited by nitrogen laser radiation. IAAFA, no. 3, 1985, 93-96.
678. Froehlich, D.; Weber, H.J.; Wille, R.; Francini, R. (). Temperature dependence of the exciton lineshape of $\text{GeO}(\text{sub}2)$. PSSBB, v. B126, no. 1, 1984, 305-310. (RZFZA, 85/6L398).
679. Gadzhiyev, Z.I.; Musayev, Sh.M. (). Resonant Raman study on the nature of intermolecular interactions of chlorophyll-A in vivo. Vysokoenenergeticheskiye protsessy i fizika molekul. Baku, 1984, 85-90. (RZFZA, 85/5L308).
680. Gawlik, W. (). Optical pumping effects in Doppler-free laser spectroscopy. ATPLB, v. A66, no. 5, 1984, 401-421. (RZRAB, 85/5Ye639).
681. Gorelik, V.S.; Knaypp, K.; Fayzullov, T.F. (FIAN). Effect of pulsed laser irradiation on the giant Raman spectra of thiocarbocyanine dyes. KRSFA, no. 5, 1985, 7-10.
682. Gorokhovskiy, A.A.; Pal'm, V.V. (). Hole burning and phosphorescence line narrowing at the forbidden $T(\text{sub}2)$ - $S(\text{sub}0)$ transition in the low-temperature spectrum of impurity organic molecules. Sovremennyye aspekty tonkostrukturnoy i selektivnoy spektroskopii. K 30-letiyu efekta Shpol'skogo. MGPI. Moskva, 1984, 96-100. (RZFZA, 85/5L512).
683. Gudyalis, V.V.; Dagis, S.P.; Mintsyavichyus, V.Yu.; Slavenas, Yu.Yu.Yu.; Stretskite, G.V.I. (). Study on the absorption band structure of an ethanol solution of 1,3,3,1',3',3'-hexamethyl-5,5'-dinitroindocarbocyanine dye. OPSPA, v. 58, no. 5, 1985, 1020-1022.

684. Herrmann, R.; Mueller, H.U.; Schurig, Th.; Preppernau, U.; Koch, R.; Mengel, B. (). Laser spectrometer for submillimeter spectroscopy of solids. EXPPA, no. 5, 1984, 449-461. (RZFZA, 85/5L613).
685. Ivanov, E.I.; Krylov, I.R. (). Broadening of absorption saturation resonances in SiF(sub4) by collisions with Xe. OPSPA, v. 58, no. 5, 1985, 1192-1193.
686. Ivanov, I.Ye.; Naumova, T.M. (). Analysis of vibronic interactions in complex molecules by their preresonance Raman spectra. OPSPA, v. 58, no. 5, 1985, 1023-1028.
687. Ivanov, I.Ye.; Naumova, T.M.; Kopranenkov, V.N. (). Intensity distribution in resonance Raman spectra of various porphyrines in solution. Sovremennyye aspekty tonkostrukturnoy i selektivnoy spektroskopii. MGPI. Moskva, 1984, 90-96. (RZFZA, 85/6L297).
688. Kharlamov, B.M.; Al'shits, Ye.I.; Personov, R.I. (). Spin structure and Zeeman effect in phosphorescence spectra of complex molecules under laser T(sub 1)-S(sub 0) excitation. Sovremennyye aspekty tonkostrukturnoy i selektivnoy spektroskopii. MGPI. Moskva, 1984, 48-54. (RZFZA, 85/6L497).
689. Klimkin, V.M. (IOA). Diagnostics of pulsed lasers using modulation laser spectroscopy. TVYTA, no. 3, 1985, 568-571.
690. Korotayeva, Ye.A.; Naumova, T.M. (). Intramolecular interactions which form the phosphorescence spectrum of triphenylene. ZPSBA, vol. 42, no. 6, 1985, 948-954.
691. Kuz'min, V.S.; Sayko, A.P. (). Dephasing effects in transient four-photon interactions of ultrashort light pulses in a resonant medium. CSSPSpek, 3rd, Minsk, 28-30 Sep 1983. Materialy. Minsk, 1984, 183-187. (RZFZA, 85/5L1225).
692. Lavrik, N.L. (). Delayed fluorescence of exciplex systems of pyrene with diethylaniline in methanol. OPSPA, v. 58, no. 6, 1985, 1281-1285.
693. Lukiyanets, B.A.; Boychuk, V.V. (). Raman scattering as a method to determine modifications in layered crystals. UFZHA, no. 12, 1984, 1871-1873. (RZFZA, 85/6L416).

694. Malov, L.R.; Mukhtarov, R.I. (). Study on Stark modulation of $\nu(\text{sub}2)$ absorption band lines in ammonia in a nitrogen atmosphere using diode lasers. ZPSBA, vol. 42, no. 5, 1985, 739-743.
695. Mierzecki, R.; Jurkowska, K.; Janko, P. (). Positions and contours of dimethyl sulfoxide Raman bands in the presence of electron acceptor reagents. PJCHD, no. 7-9, 1983, 993-1004. (RZFZA, 85/6L298).
696. Nabiyeu, Sh.Sh.; Fedoseyev, V.N.; Yusupov, A.K. (SamGU). Effect of light polarization on the photo-ionization spectra of the isotopic and fine structure of ytterbium isotopes. IUZFA, no. 3, 1985, 70-72.
697. Ngoc, T.; Bich, V.T.; Anh, T.K. (). Kinetics of luminescence quenching in neodymium-doped fluorophosphate glasses. PSSAB, v. A86, no. 1, 1984, K45-K50. (RZFZA, 85/6L520).
698. Nikitin, S.Yu. (MGU). Effect of incoherence of laser pulses on the signal characteristics of transient active spectroscopy. VMUFA, no. 3, 1985, 48-55.
699. Osad'ko, I.S. (). Absorption spectrum calculations of the intensity of resonance Raman scattering by polyatomic molecules. Sovremennyye aspekty tonkostrukturnoy i selektivnoy spektroskopii. MGPI. Moskva, 1984, 37-43. (RZFZA, 85/6L296).
700. Ovchinnikov, I.V.; Serebrennikov, L.V.; Mal'tsev, A.A. (MGU). Raman scattering spectra of aluminum oxide molecules isolated in argon matrices. ZFKHA, no. 6, 1985, 1558-1560.
701. Pavlycheva, N.K.; Baygulova, Ye.K.; Balyasnikova, L.G. (GOI). Two-band spectrograph with a concave holographic grating which can be fixed in two positions. OPMPA, no. 6, 1985, 27-28.
702. Peschel, C.; Orzegowski, H.; Thiede, G.; Kempe, N.; Buettner, E. (). Pulsed light source for ultrashort time spectroscopy. Patent GDR, no. 211021, 27 Jun 1984. (RZRAB, 85/5Ye635).
703. Petnikova, V.M.; Pleshanov, S.A.; Shuvalov, V.V. (MGU). Role of various relaxation mechanisms in nonlinear spectroscopy of condensed media. VMUFA, no. 6, 1984, 24-29.

704. Pohl, U.W.; Gumlich, H.E.; Busse, W. (). Zero phonon lines in the excitation band centered at 23,200 cm(sup -1) due to Mn(sup2+) in polymorphic ZnS. PSSBB, v. B125, no. 2, 1984, 773-777. (RZFZA, 85/6L385).
705. Rabkin, L.M.; Rychkov, G.Ye.; Torgashev, V.I.; Yuzyuk, Yu.I.; Brzhezina, B. (NIIFRGU). Raman spectra of ferroelectric langbeinites. Part 3. K(sub2)Co(sub2) [SO(sub4)](sub3). KRISA, no. 3, 1985, 599-602.
706. Raspopov, S.F.; Sukhodol'skiy, A.T. (FIAN). Coherent electrooptic spectroscopy of capillary vibrations in droplets. KRSFA, no. 6, 1985, 10-13.
707. Rebane, K.K.; Pal'm, V. (). Doppler spectrometer for measuring narrow photochemical dips in inhomogeneously broadened spectra. ETFMB, no. 4, 1984, 461-463. (RZFZA, 85/5L365).
708. Shefer, A.D.; Shabanov, V.F.; Voronov, V.N. (IFSOAN). Study on the dynamic and structural characteristics of cesium-lithium tungstate and molybdate. FTVTA, no. 5, 1985, 1487-1491.
709. Sin'ko, S.V.; Pentin, Yu.A.; Kuramshina, G.M.; Gol'din, G.S.; Baburina, I.I. (GNIKhTES; MGU). IR spectra, Raman spectra and vibrational frequency reference in CH(sub2)SiF(sub3) and CH(sub2)ClSiCl(sub3). VMUKA, no. 2, 1985, 280-284.
710. Sirotkin, O.S.; Kolpakov, Ye.V. (KazKhTI). Laser spectrochemical analysis of glassy polyoxide coatings. IVNMA, no. 6, 1985, 1025-1027.
711. Subbi.Yu.O. (). Fluorescence spectra of 1,4-dioxi-9,10-anthraquinone in a supersonic jet stream of argon. OPSPA, v. 58, no. 5, 1985, 1043-1049.
712. Surin, N.M.; Korotayev, O.N.; Glyadkovskiy, V.I.; Donskoy, Ye.I.; Yurchenko, A.I. (). Stark modulation spectroscopy study on the basic characteristics of narrow stable dips in inhomogeneously broadened absorption spectra. Sovremennyye aspekty tonkostrukturnoy i selektivnoy spektroskopii. K 30-letiyu effekta Shpol'skogo. MGPI. Moskva, 1984, 96-100. (RZFZA, 85/5L259).

713. Tamm, T.B.; Timpmann, K.E.; Freyberg, A.M. (). Kinetics of picosecond vibrational relaxation in the excited electron state of anthracene molecules in a Shpol'skiy matrix. *Sovremennyye aspekty tonkostrukturnoy i selektivnoy spektroskopii*. MGPI. Moskva, 1984, 17-22. (RZFZA, 85/6L470).
714. Trifonov, N.Yu. (). Change in the geometry of the $\text{MnO}(\text{sub}4)(\text{sup}2-)$ radical under excitation by resonant Raman scattering. *IVUFA*, no. 1, 1985, 117-118. (RZFZA, 85/6L290).
715. Voytsekhovskaya, O.K.; Kochanov, V.P.; Makushkin, Yu.S.; Sinitza, I.N.; Solodov, A.M.; Sulakshina, O.N.; Cherepanov, V.N. (). Absorption line intensities of water vapor in the 1 μm range. *OPSPA*, v. 58, no. 5, 1985, 1016-1019.
716. Vratskiy, V.A.; Kolerov, A.N. (VNIFTRI). Quasi-c-w lasing in $\text{F}(\text{sub}2)(\text{sup}+)$ and $\text{F}(\text{sub}2)(\text{sup}-)$ color centers in NaF and its use for intracavity spectroscopy. *KVEKA*, no. 5, 1985, 1089-1091.
717. Zalesskaya, G.A.; Pavlova, V.T. (). Multiphoton absorption of CO_2 laser radiation by triplet molecules. *OPSPA*, v. 58, no. 5, 1985, 1167-1168.

J. BEAM-TARGET INTERACTION

1. Miscellaneous Targets

718. Avrutskiy, I.A.; Bazakutsa, P.V.; Maslennikov, V.L.; Prokhorov, A.M.; Sychugov, V.A.; Tishchenko, A.V. (IOF). Periodic microscopic contours on the surface of Ge and thermophysical mechanisms for forming them. *IANFA*, no. 6, 1985, 1224-1228.
719. Beyko, V.P.; Imas, Ya.A.; Libenson, M.N.; Shandybina, G.D.; Yakovlev, Ye.B. (). Formation of regular structures on the surface of silicon under the effect of a millisecond neodymium laser pulse. *IANFA*, no. 6, 1985, 1236-1239.
720. Bonch-Bruyevich, A.M. (). Introductory speech at the opening of the Sixth All-Union Conference on Nonresonant Interaction of Optical radiation with Matter. *IANFA*, no. 6, 1985, 1042-1045.
721. Bonch-Bruyevich, A.M.; Didenko, I.A.; Kaporskiy, L.N. (). Low-threshold optical breakdown at the surface of condensed materials. *IANFA*, no. 6, 1985, 1096-1102.

722. Demkovich, I.V.; Osered'ko, S.A. (). Study on thermal processes in laser processing of materials. Problemy fiziki materialov elektronnoy tekhniki (Problems of the physics of materials in electronic engineering). LvPI. UkrNIINTI. Deposit, no. 19Uk-85, 3 Jan 1984, 20-28. (RZFZA, 85/5Ye7).
723. Fedoseyev, D.V.; Varshavskaya, I.G. (). Formation of diamonds from the gas phase under laser heating. CTHGDSch, 8th, Dresden, 5-7 Mar 1984. Nachtrag zum Tagungsband. Physik Gesellschaft DDR. Place and yr of publ not given, 84-86. (RZRAB, 85/5Ye674).
724. Gavrikov, V.K. (). Pulsed vaporization of materials in a high-power optical radiation field. FKOMA, no. 3, 1985, 9-12.
725. Gol'berg, S.M.; Tribel'skiy, M.I. (NIOPIK). Laser vaporization of nonlinearly absorbing materials. ZTEFA, no. 5, 1985, 848-857.
726. Khamzin, Z.Z. (KazGU). Methods for evaluating the optical strength of film structures. VINITI. Deposit, no. 938-85, 31 Jan 1985, 9 p. (RZFZA, 85/5Ye1022).
727. Koldunov, M.F.; Filimonov, D.A.; Khaplanova, N.Ye. (). A statistical estimate of the distribution of the concentration of inclusions which trigger optical breakdown. PZTFD, no. 11, 1985, 698-701.
728. Konovalenko, Yu.V.; Kotlyarov, V.P. (). Determination of laser routines for microaperture processing. EOBMA, no. 6, 1984, 11-13. (RZRAB, 85/6Ye623).
729. Popova, L.V.; Sutugin, A.G. (). Laws governing vaporization of particles in a vacuum under the action of laser radiation. FKOMA, no. 3, 1985, 17-20.
730. Romanov, I.M.; Ivlev, G.D.; Budkevich, B.A.; Pilipovich, V.A.; Ges', I.A.; Zhvavyy, S.P. (IEANBel). Variation in the properties of electrochromic films under the effect of pulsed laser radiation. IANFA, no. 6, 1985, 1157-1161.
731. Sandow, E.; Wesch, W.; Nebauer, E. (). Ohmic AuGe contacts on n-GaAs produced by nanosecond laser pulse irradiation. PSSAB, v. A85, no. 2, 1984, K169-K173. (RZFZA, 85/5N466).

732. Seidel, V.; Zscherpe, G.; Wottawa, H.; Suphan, K.H.; Pfeil, G.; Henneberger, J.; Berger, A.; Liebscher, H.J. (). Method for fabricating thin-film conductors by laser processing. Patent GDR, no. 213556, 12 Sep 1984. (RZRAB, 85/6Ye621).
733. Uglov, A.A. (). 105th Seminar on the Physics and Chemistry of Materials Processing by Concentrated Energy Fluxes, at the Institute of Metallurgy, Academy of Sciences USSR (IMET), 26 Jan 1983. FKOMA, no. 3, 1985, 143.
734. Vinogradov, B.A.; Shmagin, Yu.I.; Uspenskiy, D.M. (IITLP). Laser processing of chemical fibers and films. TsNIITEIlegprom. Deposit, no. 1153Lp-84, 20 Nov 1984, 6 p. (DERUD, 3/85, 94).
735. Wolf, R.; Zscherpe, G. (). Laser radiation resistance of optical layers under various irradiation conditions. Beitrage zur Optik und Quantenelektronik. Band 9. CFJBOQu, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 182-183. (RZRAB, 85/5Ye647).
736. Zaytsev, V.V.; Kalyuzhnaya, G.A.; Mamedov, T.S.; Shelepin, L.A. (FIAN). Epitaxy during laser action and its possibilities. ZTEFA, no. 5, 1985, 955-956.
737. Zemskiy, S.V. (). Producing protective coatings by laser. Temperaturoustoychivyye pokrytiya (Temperature-resistant coatings). CVSzhPok, 11th, Tula, 31 May - 2 June 1983. Trudy. IKhS. Leningrad, Nauka, 1985, 73-77.
738. Zscherpe, G.; Reisse, G. (). Laser processing of solid surfaces and thin layers. CTHGDSch, 8th, Dresden, 5-7 Mar 1984. Nachtrag zum Tagungsband. Place and yr of publ not given, 1-7. (RZFZA, 85/5Ye1005).

2. Metal Targets

739. Aksenov, V.P.; Zhurkin, B.G. (FIAN). Destruction of Cu and Mo mirror surfaces under the effect of high-power radiation. IANFA, no. 6, 1985, 1233-1235.
740. Arutyunyan, R.V.; Baranov, V.Yu.; Borisov, V.M.; Vinokhodov, A.Yu.; Kiryukhin, Yu.B. (IAE). Effect of near-electrode processes on the contraction of a volumetric discharge in periodic pulsed lasers. KVEKA, no. 5, 1985, 971-977.

741. Averin, V.I.; Gromov, B.I.; Kalin, A.A. (). Amplitude and time parameters of laser stress waves in metals. FKOMA, no. 3, 1985, 143.
742. Azarenkov, N.A.; Kondratenko, A.N. (KhGU). Surface waves at a plasma-metal boundary, allowing for spatial dispersion. UFZHA, no. 5, 1985, 718-725.
743. Bazhenov, V.V.; Bonch-Bruyevich, A.M.; Gagarin, A.P.; Dorofeyev, V.G.; Libenson, M.N.; Makin, V.S.; Pudkov, S.D. (). Characteristics of heating metals with intense radiation in an oxidizing medium. IANFA, no. 6, 1985, 1214-1217.
744. Bazhenov, V.V.; Makin, V.S.; Rubanova, G.M.; Trubayev, V.V. (). Formation of periodic structures on oxidizable metals under the effect of coherent light. IANFA, no. 6, 1985, 1229-1232.
745. Ben'kov, A.V.; Zinov'yev, A.V.; Usmanov, T.; Azizov, S.T. (IEANUZ). Nonthermal luminescence of metal surfaces under laser excitation. KVEKA, no. 5, 1985, 977-986.
746. Bonch-Bruyevich, A.M.; Imas, Ya.A.; Libenson, M.N.; Shandybina, G.D. (). Fluctuation in the index ellipsoid of reflection from metals during their heating by pulsed neodymium laser radiation. IANFA, no. 6, 1985, 1166-1169.
747. Bonch-Bruyevich, A.M.; Smirnov, V.N. (). Low-threshold optical breakdown and damage to a target under the effect of polarized CO₂ laser pulses. IANFA, no. 6, 1985, 1203-1207.
748. Bykovskiy, Yu.A.; Nevolin, V.N.; Fominskiy, V.Yu.; Kulikauskas, V.S.; Mamontov, A.N. (). Study on structural changes in chromium single crystals under the action of nanosecond laser pulses. PFKMD, no. 1, 1985, 138-142. (RZRAB, 85/6Ye651).
749. Dan'shchikov, Ye.V.; Dymshakov, V.A.; Lebedev, F.V.; Ryazanov, A.V. (IAE). Structure and properties of an optical discharge plasma in a CO₂ laser beam near the surface of a target. KVEKA, no. 5, 1985, 1002-1009.
750. Gagarin, A.P.; Dorofeyev, V.G.; Pudkov, S.D. (). Measuring the reflectivity and thermal stability of metal alloys during selective oxidation. IANFA, no. 6, 1985, 1221-1223.

751. Golovin, A.F.; Petrukhin, A.I. (IFZ). Vaporization of magnesium and lead by quasi-steady-state laser radiation. KVEKA, no. 6, 1985, 1282-1285.
752. Gromov, B.I.; Kalin, A.A.; Kuznetsov, M.S. (MIFI). Excitation of stress waves in metals by a laser single pulse under various boundary conditions. VINITI. Deposit, no. 1359-85, 20 Feb 1985, 34 p. (RZFZA, 85/5Ye1021).
753. Gubenko, S.I. (). Surface oxidation of steel under laser processing. IZNMA, no. 3, 1985, 190-192.
754. Gurvich, L.O.; Sobol', E.N. (). Effect of carbon diffusion on the kinetics of phase transition during laser hardening of steel. FKOMA, no. 3, 1985, 143.
755. Kalabushkin, O.I.; Kaporskiy, L.N.; Salyadinov, V.S.; Shabanov, Ye.A. (). Characteristics of single pulsed laser irradiation of metallic targets. IANFA, no. 6, 1985, 1218-1220.
756. Kosobukin, V.A. (FTI). Collective effects in the amplification of an external electric field on the surface of metals. IANFA, no. 6, 1985, 1111-1120.
757. Kremnev, L.S.; Vladimirova, O.V.; Sagadeyeva, T.G.; Busurina, I.A.; Kholodnov, Ye.V.; Mitauer, S.Ya. (). Laser hardening of plane-parallel finite-length surfaces. FKOMA, no. 3, 1985, 13-16.
758. Leshchinskiy, L.K.; Samotugin, S.S.; Pirch, I.I.; Petrunichev, V.A.; Anisimov, Yu.I.; Puyko, A.V.; Solyanik, N.Kh. (). Effect of surface hardening by a plasma jet on the damage to carbon steels. FKOMA, no. 3, 1985, 100-106.
759. Lyashenko, Ye.I.; Shumrikov, V.V.; Kosyrev, F.K.; Moryashchev, S.F.; Fromm, V.A. (). Absorptive capacity of a flare formed from the interaction of c-w CO₂ laser radiation on X18H10T steel. FKOMA, no. 3, 1985, 21-24.
760. Min'ko, L.Ya.; Loparev, A.N.; Nasonov, V.I.; Kovalev, A.M. (IFANB). Action of quasi-steady-state millisecond neodymium laser pulses on metal. KVEKA, no. 6, 1985, 1211-1219.
761. Pompe, W. (). Surface processing by high-power lasers. Beitrage zur Optik und Quantenelektronik. Band 9. CFJBOQu, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 8-11. (RZRAB, 85/5Ye605).

762. Surov, S.P.; Sychugov, V.A. (IOF). A highly efficient excitation of surface electromagnetic waves on a corrugated metal surface. ZTEFA, no. 6, 1985, 1136-1141.

3. Dielectric Targets

763. Aukhadeyev, R.R.; Voronov, V.I.; Pol'skiy, Yu.Ye. (KAI). Laser thermal splitting of glass tubes in the Yupiter-TU. VINITI. Deposit, no. 7872-84, 11 Dec 1984, 12 p. (DERUD, 4/85, 604a).
764. Baglikov, V.B.; Dmitriyev, V.A.; Kornetov, V.N.; Ognev, A.N.; Popov, B.N. (MEI). Crystalline structure and electrophysical properties of bismuth germanate films. IVNMA, no. 5, 1985, 830-835.
765. Bal'kyavichyus, P.Y.; Buzyalis, R.R.; Dement'yev, A.S.; Kosenko, Ye.K.; Maldutis, E.K. (IFANL₁). Effect of pulse time evolution on optical breakdown and stimulated scattering in optical glass. IANFA, no. 6, 1985, 1194-1199.
766. Balitskas, S.K.; Gul'binas, I.A.; Zhilenis, A.A.; Maldutis, E.K.; Sakalauskas, S.V. (IFANL₁). Effect of electrostriction on the interaction laser radiation with glass. IANFA, no. 6, 1985, 1183-1187.
767. Balitskas, S.K.; Maldutis, E.K. (IFANL₁). Accumulative nature of laser destruction of optical glasses. IANFA, no. 6, 1985, 1076-1083.
768. Dumayev, K.M.; Manenkov, A.A.; Maslyukov, A.P.; Matyushin, G.A.; Nechitaylo, V.S.; Prokhorov, A.M. (IOF). Mechanism of optical breakdown and destruction of transparent polymers. IANFA, no. 6, 1985, 1084-1095.
769. Glebov, L.B.; Dokuchayev, V.G.; Yefimov, O.M.; Nikonorov, N.V.; Petrovskiy, G.T. (). Role of radiation color centers in the onset of optical breakdown of silicate glass. IANFA, no. 6, 1985, 1179-1182.
770. Glebov, L.B.; Yefimov, O.M. (). Study on the characteristics and mechanism of internal optical breakdown of glass. IANFA, no. 6, 1985, 1140-1145.
771. Golubtsov, A.A.; Pilipetskiy, N.F.; Sudarkin, A.N.; Chudinov, A.N.; Shkunov, V.V. (IPMe). Angular dependence of the threshold of optical surface damage to transparent dielectrics. DANKA, v. 282, no. 4, 1985, 861-864.

81. Kovalyuk, A.M.; Kovalyuk, V.B.; Kovalyuk, M.V. Correlations in an uncooled semiconductor. *Phys. Solid State*, 1985, no. 6, 1985, 1100-1102.
82. Buzik, V.; Kovalyuk, V.B.; Kovalyuk, M.V. Destruction of a semiconductor by a laser. *Phys. Solid State*, 1985, 1200-1202.
83. Kovalyuk, A.M.; Kovalyuk, V.B.; Kovalyuk, M.V. Destruction of gallium arsenide by a laser. *Phys. Solid State*, 1985, 1203-1205.
84. Kovalyuk, A.M.; Kovalyuk, V.B.; Kovalyuk, M.V. Destruction of gallium arsenide by a laser. *Phys. Solid State*, 1985, 1206-1208.
85. Kovalyuk, A.M.; Kovalyuk, V.B.; Kovalyuk, M.V. Study of the destruction of gallium arsenide by a laser. *Phys. Solid State*, 1985, 1209-1211.
86. Kovalyuk, A.M.; Kovalyuk, V.B.; Kovalyuk, M.V. Study of the destruction of gallium arsenide by a laser. *Phys. Solid State*, 1985, 1212-1214.
87. Kovalyuk, A.M.; Kovalyuk, V.B.; Kovalyuk, M.V. Study of the destruction of gallium arsenide by a laser. *Phys. Solid State*, 1985, 1215-1217.
88. Kovalyuk, A.M.; Kovalyuk, V.B.; Kovalyuk, M.V. Study of the destruction of gallium arsenide by a laser. *Phys. Solid State*, 1985, 1218-1220.
89. Kovalyuk, A.M.; Kovalyuk, V.B.; Kovalyuk, M.V. Study of the destruction of gallium arsenide by a laser. *Phys. Solid State*, 1985, 1221-1223.

NO-A191 363

BIBLIOGRAPHY OF SOVIET LASER DEVELOPMENTS NUMBER 77 MAY 2/2

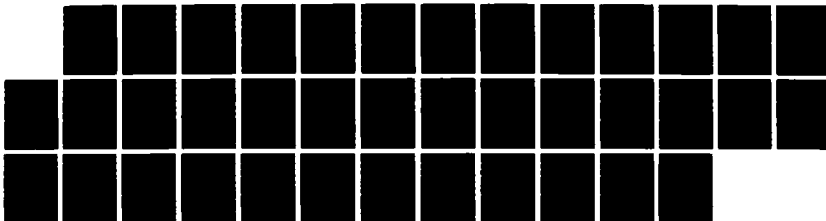
- JUNE 1985(U) DEFENSE INTELLIGENCE AGENCY WASHINGTON

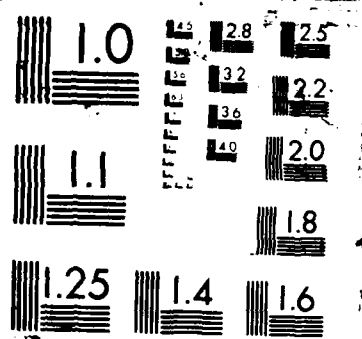
DC DIRECTORATE FOR SCI.. SEP 86 DIA-DST-27002-005-06

UNCLASSIFIED

F/O 9/3

ML





790. Trokhimchuk, P.P. (FTIUNTs). Irreversible action of optical radiation on semiconductors. N.N. Bogolyubov's approach. VINITI. Deposit, no. 929-85, 31 Jan 1985, 13 p. (RZFZA, 85/5Yel010).
791. Wagner, M. (). Controlling the crystallization process in ion-implanted silicon films under laser irradiation. Beitrage zur Optik und Quanten-elektronik. Band 9. CFJBOQu, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 49-51. (RZFZA, 85/5L1249).
792. Yanushkevich, V.A.; Polyaninov, A.V.; Prutskov, Ye.G.; Polygalov, G.A. (IMET). Formation mechanism and ionization of point defects in semiconductors during pulsed laser irradiation. IANFA, no. 6, 1985, 1146-1152.

K. PLASMA GENERATION AND DIAGNOSTICS

793. Aleksandrov, V.V.; Brenner, M.V.; Koval'skiy, N.G.; Loburev, S.V.; Rubenchik, A.M. (). Brillouin scattering in a laser plasma at moderate light flux densities of 10^{12} to 10^{14} watts/cm². ZETFA, v. 88, no. 3, 1985, 781-788.
794. Allin, A.P.; Borisenko, A.Yu.; Kelarev, Ye.L.; Mochalkina, O.R.; Subbotin, L.K.; Stepanov, V.M. (). Silicon image signal shaper for automation of adjustment and focusing of laser beams [in laser fusion]. Elektronnyye izmeritel'nyye ustroystva i sistemy. Moskva, 1984, 101-105. (RZRAB, 85/5Ye697).
795. Anan'in, O.B.; Bykovskiy, Yu.A.; Kantsyrev, V.L.; Frondzey, I.Ya. (). Effect of the laser radiation wavelength on the energy output of soft x-radiation from a laser plasma. PZTFD, no. 11, 1985, 667-669.
796. Askaryan, G.A. (IOF). Neutrino beams in media and electromagnetic radiation coming from them. IOF. Preprint, no. 202 (in English), 1985, 8 p.
797. Babich, L.P.; Shamrayev, B.N. (). The loss of electrons in the cathode layer of three-dimensional discharges. ZTEFA, no. 6, 1985, 1170-1172.
798. Barabash, L.Z.; Bragin, B.N.; Golubev, A.A.; Gromov, A.I.; Zakharenkov, Yu.A.; Malysheva, V.S.; Nikitenko, A.I.; Nikitina, T.F.; Ryazanov, G.V.; Khaydarov, R.T.; Sharkov, B.Yu.; Shamayev, O.B.; Shikanov, A.S. (FIAN). Microchannel analyzer for recording corpuscular and x-ray emission from a laser plasma. KRSFA, no. 5, 1985, 16-20.

799. Basov, N.G.; Gus'kov, S.Yu.; Danilova, G.V.; Demchenko, N.N.; Zmitrenko, N.V.; Karpov, V.Ya.; Mishchenko, T.V.; Rozanov, V.B.; Samarskiy, A.A. (FIAN). Thermonuclear yield of targets for high-power lasers in the shortwave band (= or < 1 μ m). KVEKA, no. 6, 1985, 1289-1292.
800. Basov, N.G.; Mikhaylov, Yu.A.; Rozanov, V.B.; Sklizkov, G.V. (FIAN). Laser fusion, a review of progress [in English]. SCUSD, no. 5, 1985, 2-10.
801. Belousov, V.I.; Korneychuk, V.I. (). Charge composition of recombining plasmoids. VINITI. Deposit, no. 966-85, 18 p. (RZFZA, 85/5G21).
802. Bessarab, A.V.; Dolgaleva, G.V.; Zaretskiy, A.I.; Kirillov, G.A.; Kochemasov, G.G.; Murugov, V.M.; Nasyrov, G.F.; Rogachev, V.G.; Romanov, Yu.A.; Senik, A.V.; Sukharev, S.A. (). Study on a thermonuclear laser plasma in targets with an inverted corona. DANKA, v. 282, no. 4, 1985, 857-861.
803. Boyko, V.A. (). Spectroscopy of multi-ionized atoms. Aktual'nyye problemy metrologii v radioelektronike. Moskva, Izdatelstvo standartov, 1985, 203-220.
804. Bunkin, F.V.; Derzhiev, V.I.; Mayorov, S.A.; Yakovlenko, S.I. (IOF). Tabulation of the optical characteristics of a quasi-steady-state supercooled multicharged ion plasma. IOF. Preprint, no. 290, 1985, 24 p.
805. Denisov, V.I.; Preobrazhenskiy, N.G. (). Diagnostics of a dense transient plasma by the relative intensities of the spectral lines, allowing for radiation trapping. OPSPA, v. 58, no. 5, 1985, 1050-1054.
806. Gaponov, S.V. (). Superthin solid films and multilayered structures: production, research and applications methods. UFNAA, vol. 146, no. 2, 1985, 343-346.
807. Gel'medova, L.A.; Nikulin, N.G.; Smirnov, B.M. (ITF). Hot plasma as an active medium for a shortwave laser. ITF. Preprint, no. 113, 1984, 14 p. (RZFZA, 85/5G427).
808. Gribkov, V.A.; Denus, S. (Poland); Dubrovskiy, A.V.; Isakov, A.I.; Kalachev, N.V.; Krokhin, O.N.; Nikulin, V.Ya.; Sledzinski, S. (Sledzin'skiy, S.) (Pol); Czekaj, S. (Chekay, S.) (Pol). (FIAN). X-rays from a plasma focus under laser action. FIPLD, no. 1, 1985, 117-122.

809. Gul'ko, V.M.; Kononov, A.V. (KIYaI). Neutron generator with a laser ion source. KIYaI. Preprint, no. 34, 1983, 10-14. (RZFZA, 85/6V563).
810. Gus'kov, S.Yu. (FIAN). Tenth International Conference of the International Atomic Energy Agency on Plasma Physics and Controlled Nuclear Fusion Research, London, 12-19 Sep 1983. FIPLD, no. 6, 1985, 745-757.
811. Gus'kov, S.Yu.; Lebo, I.G.; Rozanov, V.B.; Trebuleva, L.Ye. (FIAN). Effect of spontaneous magnetic fields on the energy remaining from charged thermonuclear particles in laser targets. FIPLD, no. 6, 1985, 674-683.
812. Konov, V.I.; Nikitin, P.I.; Prokhorov, A.M. (IOF). Atmospheric breakdown near a target by two repeated CO2 laser pulses. Magnetic field. IANFA, no. 6, 1985, 1208-1213.
813. Konov, V.I.; Silenok, A.S. (IOF). Study on pulsed optical discharges in side ejection operating modes. FIPLD, no. 5, 1985, 600-609.
814. Korobkin, V.V.; Marin, M.Yu.; Pil'skiy, V.I.; Polonskiy, L.Ya.; Pyatnitskiy, L.N. (IVTAN). Forming a continuous laser spark in air. KVEKA, no. 5, 1985, 959-963.
815. Leonov, Yu.S.; Popkov, A.F.; Rudyy, Yu.B. (). Change in the e-m characteristics of yttrium-iron garnet films after the action of high-intensity radiation from a laser plasma. ZTEFA, no. 6, 1985, 1188-1190.
816. Sayenko, V.A. (KIYaI). Devices for thermal ion deposition (review). PRTEA, no. 3, 1985, 9-21.
817. Sitenko, O.G. (). Sixth International Kiev Conference on Plasma Theory and Sixth International Congress on Waves and Instabilities in a Plasma, Lausanne [in Ukrainian]. VNUKA, no. 6, 1985, 78-84.
818. Stupitskiy, Ye.L.; Lyubchenko, O.S.; Khudaverdyan, A.M. (MIFI). Nonequilibrium processes during disintegration of a high-temperature plasmoid. KVEKA, no. 5, 1985, 1038-1049.

819. Voryna, E. (Poland); Denus, S. (Pol); Yerokhin, A.A.; Zakharenkov, Yu.A.; Mamchur, M. (Pol); Mruz, V. (Pol); Nagraba, S. (Pol); Sklizkov, G.V.; Farny, Yu. (Pol); Shikanov, A.S. (FIAN). Magnetic analyzer of high-energy ions in laser-compressed thermonuclear targets. KRSFA, no. 5, 1985, 21-24.
820. Vygovskiy, O.B.; Gus'kov, S.Yu.; Il'in, D.V.; Levkovskiy, A.A.; Rozanov, V.B.; Sherman, V.Ye. (FIAN). Monte-Carlo mathematical modeling of the diagnostic characteristics of thermonuclear particles in a laser plasma. FIPLD, no. 6, 1985, 684-687.
821. Yel'yashevich, M.A.; Min'ko, L.Ya.; Romanov, G.S.; Stankevich, Yu.A.; Chivel', Yu.A.; Chumakov, A.N. (NIIPFP). Dynamics of a plasma which arises during the effect of laser radiation on solid targets. IANFA, no. 6, 1985, 1132-1139.
822. Zakharenkov, Yu.A.; Isakov, A.I.; Karnaukhov, A.A.; Kopysov, I.A.; Sklizkov, G.V.; Shikanov, A.S. (FIAN). The use of a multi-channel analyzer for the automated collection and processing of data for laser plasma diagnostics. ZTEFA, no. 6, 1985, 1084-1089.
823. Zozulya, A.A.; Silin, V.P.; Tikhonchuk, V.T. (FIAN). Two-plasma decay in an inhomogeneous plasma. FIAN. Preprint, no. 198, 1985, 31 p.

III. MONOGRAPHS, BOOKS, CONFERENCE PROCEEDINGS

824. Agaletskiy, P.N.; Boyko, V.A.; Dadashev, R.S.; Mekhannikov, A.I.; Obukhov, A.S.; Petrov, G.D.; Pustovoyt, V.I.; Pushkin, S.B.; Tatarenkov, V.M.; Chuyko, V.G.; Yagola, G.K. (authors); Korobov, V.K. (ed). (). Current problems of metrology in radioelectronics. Aktual'nyye problemy metrologii v radioelektronike. Moskva, Izdatelstvo standartov, 1985, 296 p.
825. Antsibor, V.Ya. (). Laser instruments for mine surveying. Lazernyye pribory dlya marksheyderskikh rabot. VNIMI. Moskva, Neddra, 1985, 188 p.
826. Bakhrakh, L.D.; Kremenetskiy, S.D.; Kurochkin, A.P.; Usin, V.A.; Shifrin, Ya.S. (). Methods for measuring the parameters of radiating systems in the near field. Metody izmereniy parametrov izluchayushchikh sistem v blizhney zone. NSPGAN. Leningrad, Nauka, 1985, 272 p.
827. Belen'kiy, M.S.; Lukin, V.P.; Mironov, V.L.; Pokasov, V.V. (authors); Zuyev, V.Ye. (ed). (). Coherence of laser radiation in the atmosphere. Kogerentnost' lazernogo izlucheniya v atmosfere. IOA. Novosibirsk, Nauka, 1985, 176 p.
828. Bolotnikova, T.N. (MGPI). Modern aspects of fine-structure and selective spectroscopy. 30 years of the Shpol'skiy effect. Sovremennyye aspekty tonkostrukturnoy i selektivnoy spektroskopii. K 30-letiyu effekta Shpol'skogo. MGPI. Moskva, 1984, 208 p. (RZFZA, 85/5L161).
829. Bykovskiy, Yu.A.; Nevolin, V.N. (). Laser mass-spectroscopy. Lazernaya mass-spektrometriya. Moskva, Energoatomizdat, 1985, 129 p.
830. Chubarov, Ye.P. (). Control of systems with mobile sources of action. Upravleniye sistemami s podvizhnymi istochnikami vozdeystviya. Moskva, Energoatomizdat, 1985, 289.
831. Contributions to optics and quantum electronics. Vol. 9. Spring School on Optics, 16th, Jena, 9-11 Jul 1984. Proceedings. Beitrage zur Optik und Quantenelektronik. Band 9. CFJBOQu, 16th, Jena, 9-11 Jul 1984. Vortraege. Physik Gesellschaft DDR. Jena, 1984, 191 p. (RZFZA, 85/5L818).

832. Dement'yev, A.S. (). Adaptive optics and possibilities for its use. Adaptivnaya optika i vozmozhnost' yeye primeneniya. Obshchestvo Znaniye LitSSR. Vil'nyus, 1984, 27 p. (Knizhnaya letopis'. Dopolnitel'nyy vypusk. Knigi i broshyuri, 4/85, 4830).
833. Development of elements and systems for industrial radiooptics. Razrabotka elementov i sistem tekhnicheskoy radiooptiki. TulPI. Tula, 1984, 156 p. (RZFZA, 85/5Zh3).
834. Gaprindashvili, Kh.I.; Dzhangobegov, R.P.; Kogan, V.Ye.; Nakaidze, D.M. (). Fiberoptics. Materials, technology, application. Volokonnaya optika: Materialy, tekhnologiya, primeneniye. Tbilisi, Metsniyereba, 1984, 148 p. (RZFZA, 85/6L701).
835. Grodnev, I.I.; Larin, Yu.T.; Teumin, I.I. (). Optical cables: design, characteristics, production and applications. Opticheskiye kabeli: konstruksii, kharakteristiki, proizvodstvo i primeneniye. Moskva, Energoatomizdat, 1985, 176 p.
836. High vacuum, boundary surfaces, thin films. Conference, 8th, Dresden, 5-7 Mar 1984. Supplement. Hochvakuum, Grenzflaechen/Duene Schichten. CTHGDSch, 8th, Dresden, 5-7 Mar 1984. Nachtrag zum Tagungsband. Physik Gesellschaft DDR. Place and yr of publ not given, 109 p. (RZFZA, 85/6A54).
837. Hofmann, C.; Hordwig, W. (eds). (). Contributions to optics and quantum electronics. Vol. 8. Spring School on Optics, 15th, Karl-Marx-Stadt, 11-14 Apr 1983. Proceedings. Beitrage zur Optik und Quantenelektronik. Band 8. CFJBOQu, 15th, Karl-Marx-Stadt, 11-14 Apr 1983. Vortraege. East Berlin, 1983, 212 p. (RZFZA, 85/5L819).
838. Ismailov, T.K.; Pashayev, A.M.; Zeynalov, A.K.; et al. (). Theory of laser scanning devices and their maximum resolving power. K teorii lazernykh skaniruyushchikh ustroystv i ikh predel'naya razreshayushchaya sposobnost'. NPOKIANAz. Baku, Elm, 1984, 28 p. (Knizhnaya letopis'. Dopolnitel'nyy vypusk. Knigi i broshyuri, 4/85, 5000).

839. Ismailov, T.K.; Shifrin, K.S. (eds). (). Optics of the ocean and atmosphere. 6th Plenum of the Working Group on Optics of the Ocean, Commission of the Academy of Sciences USSR on Problems of the World Ocean, Baku, 29 Oct-3 Nov 79. Papers. Optika okeana i atmosfera. CPRGOOKA, 6th, Baku, 29 Oct - 3 Nov 1979. Materialy. KPMOAN. Baku, 1983, 400 p. (RZFZA, 85/5L790).
840. Karasik, V.Ye. (auth); Pakhomov, I.I. (ed). (MVTU). Methods for controlling laser radiation. Acoustooptic modulators and deflectors. Metody upravleniya lazernym izlucheniym. Akustoopticheskiye modulyatory i deflektory. MVTU. Moskva, 1984, 56 p. (Knizhnaya letopis'. Dopolnitel'nyy vypusk. Knigi i broshyuri, 4/85, 5018).
841. Kazakevich, V.V. (ed). (). Instrument manufacture and automatic control. No. 2. Laser devices and their application. Priborostroyeniye i avtomaticheskyy kontrol'. Vypusk 2. Lazernyye ustroystva i ikh primeneniye. Moskva, Mashinostroyeniye, 1985, 256 p.
842. Klimkov, Yu.M. (). Applied laser optics. Prikladnaya lazernaya optika. Series: Biblioteka priborostroitelya. Moskva, Mashinostroyeniye, 1985, 128 p.
843. Koreneva, L.G.; Zolin, V.F.; Davydov, B.L. (authors); Zhabotinskiy, M.Ye. (ed). (IRE). Nonlinear optics of molecular crystals. Nelineynaya optika molekulyarnykh kristallov. Moskva, Nauka, 1985, 200 p.
844. Korobeynikov, V.P. (). Problems in the theory of point explosion. Zadachi teorii tochechnogo vzryva. Moskva, Nauka, 1985, 400 p.
845. Kovarskiy, V.A. (ed). (). Kinetic processes in impurity semiconductors in external fields. Kineticheskiye protsessy v primesnykh poluprovodnikakh vo vneshnikh polyakh. Kishinev, Shtiintsa, 1984, 103 p. (RZFZA, 85/5N303).
846. Kunayev, A.M. (ed). (). The stable isotope osmium-187 in scientific research. Stabil'nyy izotop osmiy-187 v nauchnykh issledovaniyakh. Alma-Ata, Nauka, 1984, 87 p. (RZFZA, 85/6V3).
847. Luk'yanov, S.Yu. (ed). (). Diagnostics of a thermonuclear plasma. Diagnostika termoyadernoy plazmy. Moskva, Energoatomizdat, 1985, 165 p. (RZFZA, 85/5G371).

948. Mishchuk, V.Ye. (MGU). Introduction to the physics of plasma radiation. Vvedeniye v fiziku izlucheniya plazmy. MGU. Moskva, 1984, 111 p. (Tochnyye izmereniya i kvantovaya elektronika, no. 36, 1985, 684).
849. Molin, Yu.N.; Panfilov, V.N.; Petrov, A.K. (authors); Smirnov, B.M. (ed). (IKhKG). Infrared photochemistry. Infirakrasnaya fotokhimiya. IKhKG. Novosibirsk, Nauka, 1985, 255 p.
850. Orlov, M.Yu.; Yurchak, B.S. (eds). (IEM). Remote probing of the atmosphere. Distantсионное зондирование атмосферы. GKGKP. IEM. Trudy, no. 38(121), 1985, 124 p.
851. Papousok, D. (ed). (). International Conference on High Resolution Infrared Spectroscopy, 8th, Liblice near Prague, 3-7 Sep 1984. Proceedings. Program of the Sessions. Abstracts of the Papers (all in English). CICHIRS. Czechoslovak Academy of Sciences. Prague, yr of publ not given, 103 p. (RZFZA, 85/5L159).
852. Physics of microelectronic instruments. Fizika mikroelektronnykh priborov. MIET. Moskva, 1984, 123 p. (RZFZA, 85/6N2).
853. Prokhorov, A.M. (ed). (FIAN). Picosecond electro-optic diagnostics in laser research. Pikosekundnaya elektronno-opticheskaya diagnostika v lazernykh issledovaniyakh. FIAN. Trudy, no. 155, 1985, 245 p.
854. Ryabov, S.G.; Toropkin, G.N.; Usol'tsev, I.F. (). Instruments of quantum electronics. Pribory kvantovoy elektroniki. 2nd ed revised and enlarged. Moskva, Radio i svyaz', 1985, 280 p. (RZRAB, 85/5Ye6).
855. Sabitov, Sh.N. (ed). (). Optical studies of the atmosphere. Opticheskiye issledovaniya atmosfery. Alma-Ata, Nauka, 1984, 176 p. (RZFZA, 85/5L791).
856. Schwenke, W.; Heunemann, L. (eds). (). High vacuum, boundary surfaces, thin films. Conference, 8th, Dresden, 5-7 Mar 1984. Contributions. Vol. 1. Hochvakuum, Grenzflaechen/Duene Schichten. CTHGDSch, 8th, Dresden, 5-7 Mar 1984. Beitrage. Band 1. Physik Gesellschaft DDR. East Berlin, yr of publ not given, 183 p. (RZFZA, 85/6A53).
857. Scientific and Technical Conference on Progressive Methods for Developing Laser Optical Elements, Minsk, 20-22 Feb 1984. Papers. CNTSPMSL, Minsk, 20-22 Feb 1984. Materialy. IFANB. Preprint, no. 342, 1984, 55 p. (RZFZA, 85/6L660).

858. Shepelevich, V.V. (). Introduction to coherent optics and holography. Vvedeniye v kogerentnuyu optiku i golografiyu. Minsk, Vysheyshaya shkola, 1985, 144 p.
859. Tarasov, L.V. (). Lasers: performance and reliability. Lazery: deystvitel'nost' i nadezhdy. Series: Bibliotekha "Kvant", no. 42. Moskva, Nauka, 1985, 176 p.
860. Timofeyev, Yu.P.; Fridman, S.A.; Fok, M.V. (authors); Zhevandrov, N.D. (ed). (). Light conversion. Preobrazovaniye sveta. Series: Nauka i tekhnicheskii progress (Science and technical progress). Moskva, Nauka, 1985, 177 p.
861. Tomilin, M.G. (ed). (GOI). Optics of liquid crystals. Special topic seminar, 3rd, Moscow, Apr 1983. Papers. COSOZhKr, 3rd, Moskva, Apr 1983. Materialy. GOI. Leningrad, 1984, 135 p. (RZFZA, 85/5L373).
862. Tulinov, V.F.; Feygin, V.M (eds). (GosNITsIPR). Experimental studies on the atmosphere by space technology. Eksperimental'nyye issledovaniya atmosfery s pomoshch'yu sredstv kosmicheskoy tekhniki. GKGKP. GosNITsIPR. Trudy, no. 21, Leningrad, Gidrometeoizdat, 1985, 120 p.
863. Vendik, O.G.; Gorin, Yu.N.; Popov, V.F. (). Corpuscular-photon technology. Korpuskulyarno-fotonnaya tekhnolgiya. Moskva, Vysshaya shkola, 1984, 240 p. (RZFZA, 85/6A88).
864. Zege, E.P.; Ivanov, A.P.; Katsev, I.L. (). Image transfer in scattering media. Perenos izobrazheniya v rasseivayushchey srede. Minsk, Nauka i tekhnika, 1985, 327 p.
865. Zel'dovich, B.Ya.; Pilipetskiy, N.F.; Shkunov, V.V. (). Wavefront reversal. Obrashcheniye volnovogo fronta. Moskva, Nauka, 248 p.
866. Zubakov, V.G.; Semibratov, M.N.; Shtandel', S.K. (). Technology of optical components. Tekhnologiya opticheskikh detaley. 2nd ed enlarged and revised, Moskva, Mashinostroyeniye, 1985, 368 p. (RZFZA, 85/6A96).

IV. SOURCE ABBREVIATIONS

(Note: CTC = cover-to-cover translation available)

AKZHA	Akusticheskiy zhurnal (CTC)
ATPLB	Acta physica polonica. Series A
CFJOBOQu	Fruehjahrsschule Optik: Beitrage zur Optik und Quantenelektronik
CICHRIRS	International Conference on High Resolution Infrared Spectroscopy
CISPIGas	International Symposium on the Physics of Ionized Gases
CIWKilme	Internationales wissenschaftliches Kolloquium, Ilmenau
CKAmorfP	Konferentsiya: Amorfnyye poluprovodniki
CMKNKole	Mezhdunarodnaya kongerentsiya po nelineynym kolebaniyam
CNTSPMSL	Nauchno-tekhnicheskoye soveshchaniye po probleme Progressivnyye metody sozdaniya lazernykh opticheskikh elementov
COSOZhKr	Otraslevoy seminar: Optika zhidkikh kristallov
CPRGOOKA	Plenum Rabochey gruppy po optike okeana Komissii AN SSSR po problemam Mirovogo okeana
CSSPSpek	Simpozium: Sverkhbystryye protsessy v spektroskopii
CSYuMSFV	Sovetsko-yugoslavskiy mezhdunarodnyy seminar: Fotoprotsessy vozbuzhdeniya i ionizatsii
CTHGDSch	Tagung: Hochvakuum, Grenzflaechen/Duenne Schichten
CVSRadme	Vsesoyuznoye soveshchaniye: Radiometeorologiya
CVSRVEle	Vsesoyuznyy seminar po relyativistskoy vysokochastotnoy elektronike
CYuSSPIG	Yugoslav Summer School on the Physics of Ionized Gases

CZYPA	Czechoslovak Journal of Physics
DANKA	Akademiya nauk SSSR. Doklady (CTC)
DAZRA	Akademiya nauk Azerbaydzhanskoy SSR. Doklady
DBLRA	Akademiya nauk BSSR. Doklady
DEFKA	Defektoskopiya (CTC)
DERUD	Deponirovannyye nauchnyye raboty (formerly: Deponirovannyye rukopisi. Bibliograficheskiy ukazatel'. Yestyesvennyye i tochnyye nauki, tekhnika)
ELVEA	Elektrotehniski vjesnik
EOBMA	Elektronnaya obrabotka materialov (CTC)
ETFMB	Akademiya nauk Estonskoy SSR. Izvestiya. Fizika, matematika
EXPPA	Eksperimentelle Technik der Physik
FGVZA	Fizika gorennya i vzryva (CTC)
FIPLD	Fizika plazmy (Moskva, AN SSSR) (CTC)
FIZSA	Fizika v shkole
FKOMA	Fizika i khimiya obrabotki materialov
FKSTD	Fizika i khimiya stekla (CTC)
FMBMA	Fiziko-matematicheskoe spisanie. Bulgarska akademiya na naukite
FTPPA	Fizika i tekhnika poluprovodnikov (CTC)
FTVTA	Fizika tverdogo tela (CTC)
IAAFA	Akademiya nauk Armyanskoy SSR. Izvestiya. Fizika
IANFA	Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya (CTC)
IFAOA	Akademiya nauk SSSR. Izvestiya. Fizika atmosfery i okeana (CTC)
INFZA	Inzhenerno-fizicheskiy zhurnal (CTC)

IUZFA	Akademiya nauk Uzbekskoy SSR. Izvestiya. Seriya fiziko-matematicheskikh nauk
IVNMA	Akademiya nauk SSSR. Izvestiya. Neorganicheskiye materialy (CTC)
IVUFA	Izvestiya vysshikh uchebnykh zavedeniy. Fizika (CTC)
IVYRA	Izvestiya vysshikh uchebnykh zavedeniy. Radiofizika (CTC)
IVZAA	Izvestiya vysshikh uchebnykh zavedeniy. Geodeziya i aerofotos"yemka (CTC)
IZMTB	Akademiya nauk SSSR. Izvestiya. Mekhanika tverdogo tela (CTC)
IZNMA	Akademiya nauk SSSR. Izvestiya. Metally (CTC)
KFKKA	Kozponti fizikai kutato intezet kozlemenyek (Budapest)
KHFID	Khimicheskaya fizika (CTC)
KNKTA	Kinetika i kataliz (CTC)
KRISA	Kristallografiya (CTC)
KRSFA	Kratkiye soobshcheniya po fizike (CTC)
KVEKA	Kvantovaya elektronika (journal, Moskva) (CTC)
LZFTA	Akademiya nauk Latviyskoy SSR. Izvestiya. Seriya fizicheskikh i tekhnicheskikh nauk
MORSA	Morskoy sbornik
OPAPB	Optica applicata (Poland)
OPMPA	Optiko-mekhanicheskaya promyshlennost' (CTC)
OPSPA	Optika i spektroskopiya (CTC)
OTIZD	Otkrytiya, izobreteniya
OTPIA	Otbor i peredacha informatsii. Fiziko-mekhanicheskii institut AN UkrSSR. Respublikanskiy mezhvedomstvennyy sbornik nauchnykh trudov. Kiyev, Naukova dumka

PETSD	Poluprovodnikovaya elektronika v tekhnike svyazi (Moskva)
PFKMD	Poverkhnost'. Fizika, khimiya, mekhanika (Moskva)
PJCHD	Polish Journal of Chemistry
PMAMA	Prikladnaya matematika i mekhanika (CTC)
PRTEA	Pribory i tekhnika eksperimenta (CTC)
PSSAB	Physica status solidi (A). Applied Research (GDR)
PSSBB	Physica status solidi (B). Basic Research (GDR)
PZTFD	Zhurnal tekhnicheskoy fiziki. Pis'ma (CTC)
RAELA	Radiotekhnika i elektronika (journal, Moskva)(CTC)
RATEA	Radiotekhnika (journal, Moskva) (CTC)
RZFZA	Referativnyy zhurnal. Fizika
RZGAB	Referativnyy zhurnal. Geodeziya i aeros"yemka
RZGFA	Referativnyy zhurnal. Geofizika
RZRAB	Referativnyy zhurnal. Radiotekhnika
SAKNA	Akademiya nauk Gruzinskoy SSR. Soobshcheniya
SCUSD	Science in the USSR (Moscow)
SEPTD	Slozhnyye elektromagnitnyye polya i elektricheskiye tsepi (Ufa)
TKTEA	Tekhnika kino i televideniya
TMFZA	Teoreticheskaya i matematicheskaya fizika (CTC)
TVYTA	Teplofizika vysokikh temperatur (CTC)
UFNAA	Uspekhi fizicheskikh nauk (CTC)
UFZHA	Ukrainskiy fizicheskii zhurnal (CTC)
USKHA	Uspekhi khimii (CTC)
UZTAA	Uchenyye zapiski TsAGI (Tsentral'nyy aerogidrodinamicheskii institut, Moskva)

VABFA	Belorusskiy universitet. Vestnik. Seriya fiziko-tekhnicheskikh nauk
VANSA	Akademiya nauk SSSR. Vestnik (CTC)
VBMFA	Belorusskiy universitet. Vestnik. Seriya 1. Matematika, fizika, mekhanika
VBSFA	Akademiya nauk Belorusskoy SSR. Izvestiya. Seriya fiziko-matematicheskikh nauk
VEOFA	Vestnik oftal'mologii
VMUFA	Moskovskiy universitet. Vestnik. fizika, astronomiya (CTC)
VMUKA	Moskovskiy universitet. Vestnik. Khimiya (CTC)
VNUKA	Akademiya nauk Ukrayns'koy RSR. Visnyk
ZAKHA	Zhurnal analiticheskoy khimii (CTC)
ZETFA	Zhurnal eksperimental'noy i teoreticheskoy fiziki (CTC)
ZFKHA	Zhurnal fizicheskoy khimii (CTC)
ZFPRA	Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma (CTC)
ZNPPA	Zhurnal nauchnoy i prikladnoy fotografii i kinematografii (CTC)
ZPMFA	Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki (CTC)
ZPSBA	Zhurnal prikladnoy spektroskopii (CTC)
ZTEFA	Zhurnal tekhnicheskoy fiziki (CTC)
ZVDLA	Zavodskaya laboratoriya (CTC)
ZVMFA	Zhurnal vychislitel'noy matematiki i matematicheskoy fiziki (CTC)

V. AUTHOR AFFILIATIONS

AKIN

Akusticheskiy institut AN SSSR
Acoustics Institute, Academy of Sciences USSR

AzGU

Azerbaydzhanskiy gosudarstvennyy universitet
Azerbaydzhani State University

BGU

Belorusskiy gos universitet
Belorussian State University

BPI

Belorusskiy politekhnicheskiy institut
Belorussian Polytechnical Institute, Minsk

ChGU

Chernovitskiy gosudarstvennyy universitet
Chernovitsy State University

ChPI

Chelyabinskiy politekhnicheskiy institut
Chelyabinsk Polytechnical Institute

ChuGU

Chuvashskiy gos universitet
Chuvash State University

DalPI

Dal'nevostochnyy politekhnicheskiy institut
Far East Polytechnical Institute

EIS

Elektrotekhnicheskiy institut svyazi
Electrotechnical Institute of Communications, Leningrad

FIAN

Fizicheskiy institut im Lebedeva AN SSSR
Physics Institute imeni Lebedev, Academy of Sciences
USSR, Moscow

FTI

Fiziko-tekhnicheskiy institut im Ioffe AN SSSR
Physicotechnical Institute im Ioffe, Academy of
Sciences USSR, Leningrad

FTIANUK

Fiziko-tekhnicheskiy institut AN UkrSSR
Physicotechnical Institute, Academy of Sciences
Ukrainian SSR, Khar'kov

FTIUNTs

Fiziko-tekhnicheskiy institut Ural'skogo nauchnogo
tsentra AN SSSR
Physicotechnical Institute, Ural Scientific Center,
Academy of Sciences USSR, Izhevsk

GAO

Glavnaya astronomicheskaya observatoriya AN SSSR
Main Astronomical Observatory, Academy of Sciences USSR,
Pulkovo

GGU
 Gor'kovskiy gos universitet
 Gor'kiy State University

GIFTI
 Gor'kovskiy issledovatel'skiy fiziko-tekhnicheskiy
 institut pri Gor'kovskom gos universite
 Gor'kiy Physicotechnical Research Institute at
 Gor'kiy State University

GIIVT
 Gor'kovskiy institut inzhenerov vodnogo transporta
 Gor'kiy Institute of Water Transportation Engineers

GKGKP
 Gosudarstvennyy komitet SSSR po gidrometeorologii
 i kontrolyu prirodnoy sredy
 USSR State Committee on Hydrometeorology and
 Monitoring of the Environment

GNIKhTES
 Gos NII khimii i tekhnologii elementoorganicheskikh
 soyedineiy
 State Scientific Research Institute of Chemistry and
 Technology of Organoelemental Compounds

GOI
 Gosudarstvennyy opticheskiy institut im Vavilova
 State Optical Institute imeni Vavilov, Leningrad

GomGU
 Gomel'skiy gosudarstvennyy universitet.
 Gomel' State University.

GosNITSIPR
 Gos NI tsentr izucheniya prirodnikh resursov
 State Scientific Research Center for the Study
 of Natural Resources

GPI
 Gor'kovskiy politekhnicheskiy institut.
 Gor'kiy Polytechnical Institute.

IAE
 Institut atomnoy energii im Kurchatova
 Institute of Atomic Energy imeni Kurchatov, Moscow

IAESOAN
 Institut avtomatiki i elektrometrii SOAN
 Institute of Automation and Electronic Measurements,
 Siberian Branch Academy of Sciences USSR

IAP
 Institut analiticheskogo priborostroyeniya AN SSSR
 Institute of Analytical Instrument Manufacture,
 Academy of Sciences USSR

IBFiz
 Institut biologicheskoy fiziki AN SSSR
 Institut of Biological Physics, Academy of Sciences
 USSR, Pushchino

IEANBel
 Institut elektroniki AN BSSR
 Institute of Electronics, Academy of Sciences
 Belorussian SSR, Minsk

IEANUz
 Institut elektroniki AN UzSSR
 Institute of Electronics, Academy of Sciences
 Uzbek SSR, Tashkent

IEM
 Institut eksperimental'noy meteorologii
 Institute of Experimental meteorology, Obninsk

IFA
 Institut fiziki atmosfery AN SSSR
 Institute of Atmospheric Physics, Academy of
 Sciences, USSR

IFANB
 Institut fiziki AN BSSR
 Institute of Physics, Academy of Sciences
 Belorussian SSR, Minsk

IFANBMO
 Mogilevskiy filial Instituta fiziki AN BSSR
 Mogilev Branch of the Institute of Physics,
 Academy of Sciences Belorussian SSR

IFANDag
 Institut fiziki Dagestanskogo filiala AN SSSR
 Institute of Physics, Dagestan Branch Academy
 of Sciences USSR, Makhachkala

IFANEst
 Institut fiziki AN EstSSR
 Institute of Physics, Academy of Sciences Estonian SSR

IFANLi
 Institut fiziki AN LitSSR
 Institute of Physics, Academy of Sciences Lithuanian SSR

IFANUK
 Institut fiziki AN UkrSSR
 Institute of Physics, Academy of Sciences Ukrainian SSR,
 Kiev

IFI
 Institut fizicheskikh issledovaniy AN ArmSSR
 Institute of Physics Research, Academy of Sciences
 Armenian SSR

IFPSOAN
 Institut fiziki poluprovodnikov SOAN
 Institute of Semiconductor Physics, Siberian Branch
 Academy of Sciences USSR, Novosibirsk

IFPV
 Institut fiziki poluprovodnikov AN LitSSR
 Institute of Semiconductor Physics, Academy of Sciences
 Lithuanian SSR, Vilnius

IFSOAN
 Institut fiziki SOAN
 Institute of Physics, Siberian Branch Academy of
 Sciences USSR

IFTT
 Institut fiziki tverdogo tela AN SSSR
 Institute of Solid State Physics, Academy of
 Sciences USSR, Chernogolovka

IFZ
 Institut fiziki Zemli im Shmidta AN SSSR
 Institute of Physics of the Earth imeni Shmidt,
 Academy of Sciences USSR

IGU
 Irkutskiy gos universitet
 Irkutsk State University

IKAN
 Institut kristallografii AN SSSR
 Institute of Crystallography, Academy of Sciences
 USSR, Moscow

IKhAN
 Institut khimii AN SSSR
 Institute of Chemistry, Academy of Sciences USSR,
 Gor'kiy

IKhF
 Institut khimicheskoy fiziki AN SSSR
 Institute of Physics of Chemistry, Academy of Sciences
 USSR, Chernogolovka

IKhKG
 Institut khimicheskoy kinetiki i goreniya SOAN
 Institute of Chemical Kinetics and Combustion,
 Siberian Branch Academy of Sciences USSR, Novosibirsk

IKhNANKaz
 Institut khimicheskikh nauk AN KazSSR
 Institute of Chemical Sciences, Academy of Sciences
 Kazakh SSR, Alma-Ata

IKhS
 Institut khimii silikatov im Grebanshchikova AN SSSR
 Institute of Silicate Chemistry imeni Grebanshchikov,
 Academy of Sciences USSR, Leningrad

IMET
 Institut metallurgii im Baykova
 Institute of Metallurgy imeni Baykov, Moscow

IMMGU
 Institut mekhaniki Moskovskogo GU
 Institute of Mechanics of Moscow State University

Informsvyaz'
 • Tsentr nauchno-tekhnicheskoy informatsii i propagandy
 po svyazi "Informsvyaz'", Ministerstvo svyazi SSSR
 Center for Scientific and Technical Information and
 Propaganda on Communications, USSR Ministry of
 Communications, Moscow

INKh
 Institut neorganicheskoy khimii SOAN
 Institute of Inorganic Chemistry, Siberian Branch
 Academy of Sciences USSR

IOA
 Institut optiki atmosfery SOAN
 Institute of Atmospheric Optics, Siberian Branch
 Academy of Sciences USSR

IOF
 Institut obshchey fiziki AN SSSR
 Institute of General Physics, Academy of Sciences
 USSR, Moscow

IPANUK
 Institut poluprovodnikov AN UkrSSR
 Institute of Semiconductors, Academy of Sciences
 Ukrainian SSR, Kiev

IPF
 Institut prikladnoy fiziki AN SSSR
 Institute of Applied Physics, Academy of Sciences
 USSR, Gor'kiy

IPM
 Institut prikladnoy matematiki AN SSSR
 Institute of Applied Mathematics, Academy of Sciences
 USSR

IPMe
 Institut problem mekhaniki AN SSSR
 Institute of Problems of Mechanics, Academy of Sciences
 USSR, Moscow

IRE
 Institut radiotekhniki i elektroniki AN SSSR
 Institute of Radioengineering and Electronics, Academy
 of Sciences USSR, Moscow

IRFEANUK
 Institut radiofiziki i elektroniki AN UkrSSR
 Institute of Radiophysics and Electronics, Academy of
 Sciences Ukrainian SSR

ISAN
 Institut spektroskopii AN SSSR
 Institute of Spectroscopy, Academy of Sciences USSR

ISE
 Institut sil'notochnoy elektroniki SOAN
 Institute of High-Current Electronics, Siberian Branch
 Academy of Sciences USSR, Tomsk

ITF
 Institut teplofiziki SOAN
 Institute of Thermophysics, Siberian Branch Academy of
 Sciences USSR, Novosibirsk

ITK
 Institut tekhnicheskoy kibernetiki AN BSSR
 Institute of Technical Cybernetics, Academy of Sciences
 Belorussian SSR

ITMO

Institut teplo- i massoobmena AN BSSR
Institute of Heat and Mass Exchange, Academy of Sciences
Belorussian SSR

ITPM

Institut teoreticheskoy i prikladnoy mekhaniki SOAN
Institute of Theoretical and Applied Mechanics, Siberian
Branch Academy of Sciences USSR, Novosibirsk

IVTAN

Institut vysokikh temperatur AN SSSR
Institute of High Temperatures, Academy of Sciences USSR

IYaFANUz

Institut yadernoy fiziki AN UzSSR
Institute of Nuclear Physics, Academy of Sciences
Uzbek SSR, Ulugbek

IYaFSOAN

Institut yadernoy fiziki SOAN
Institute of Nuclear Physics, Siberian Branch Academy of
Sciences USSR, Novosibirsk

KAI

Kazanskiy aviatsionnyy institut
Kazan' Aviation Institute

KazGU

Kazakhskiy gos universitet
Kazakh State University, Alma Ata

KazKhTI

Kazanskiy khimiko-tekhnologicheskii institut imeni
S.M. Kirova
Kazan' Chemical Technology Institute imeni S.M. Kirov

KazNIINTI

Kazakhskiy NII nauchno-tekhnicheskoy informatsii i
tekhniko-ekonomicheskikh issledovaniy Gosplana KazSSR
Kazakh Scientific Research Institute of Scientific and
Technical Information and of Technical Economic Studies
for the State Plan of the Kazakh SSR, Alma-Ata

KGU

Kiyevskiy gos universitet
Kiev State University

KhGPI

Khar'kovskiy gos pedagogicheskii institut
Khar'kov State Pedagogical Institute

KhGU

Khar'kovskiy gos universitet
Khar'kov State University

KhNIIONKh

Khar'kovskiy NII obshchey i neotlozhnoy khirurgii
Khar'kov Scientific Research Institute of General
and Emergency Surgery

KIYaI
 Institut yadernykh issledovaniy AN UkrSSR
 Institute of Nuclear Research, Academy of
 Sciences Ukrainian SSR, Kiev
 KomGMI
 Kommunarskiy gorno-metallurgicheskiy institut
 Kommunarsk Mining and Metallurgy Institute
 KPIA
 Kiyevskiy politekhnicheskiy institut
 Kiev Polytechnic Institute
 KPMOAN
 Komissiya po problemam Mirovogo okeana AN SSSR
 Commission on Problems of the World Ocean,
 Academy of Sciences USSR
 KubU
 Kubanskiy gos universitet
 Kuban' State University
 KurMedInst
 Kurskiy meditsinskiy institut
 Kursk Medical Institute
 LETI
 Leningradskiy elektrotekhnicheskiy institut
 Leningrad Electric Engineering Institute
 LGU
 Leningradskiy gos universitet
 Leningrad State University
 LITLP
 Leningradskiy institut tekstil'noy i legkoy
 promyshlennosti
 Leningrad Institute of Textile and Light Industry
 LITMO
 Leningradskiy institut tochnoy mekhaniki i optiki
 Leningrad Institute of Precision Mechanics and Optics
 LIYaF
 Leningradskiy institut yadernoy fiziki im B.P.
 Konstantinova, AN SSSR
 Leningrad Institute of Nuclear Physics imeni B.P.
 Konstantinov, Academy of Sciences USSR, Leningrad
 LKI
 Leningradskiy korablestroitel'nyy institut
 Leningrad Shipbuilding Institute
 LPI
 Leningradskiy politekhnicheskiy institut
 Leningrad Polytechnic Institute
 LvPI
 L'vovskiy politekhnicheskiy institut
 L'vov Polytechnic Institute
 MAI
 Moskovskiy aviatsionnyy institut
 Moscow Aviation Institute

MEI
Moskovskiy energeticheskiy institut
Moscow Power Engineering Institute

MEIS
Moskovskiy elektrotekhnicheskiy institut svyazi
Moscow Electrotechnical Institute of Communications

MFTI
Moskovskiy fiziko-tekhnicheskiy institut
Moscow Physicotechnical Institute

MGI
Morskoy gidrofizicheskiy institut AN UkrSSR
Marine Hydrophysical Institute, Academy of Sciences
Ukrainian SSR, Sevastopol

MGPI
Moskovskiy gos pedagogicheskiy institut
Moscow State Pedagogical Institute

MGU
Moskovskiy gos universitet
Moscow State University

MIET
Moskovskiy institut elektronnoy tekhniki
Moscow Institute of Electronic Engineering

MIFI
Moskovskiy inzhenerno-fizicheskiy institut
Moscow Engineering Physics Institute

MIREA
Moskovskiy institut radiotekhniki, elektroniki i
avtomatiki
Moscow Institute of Radio Engineering, Electronics
and Automation

MoGPI
Mozyrskiy gos ped institut
Mozyr State Pedagogical Institut

MRI
Minskiy radiotekhnicheskiy institut
Minsk Radio Engineering Institute

MVTU
Moskovskoye vyssheye tekhnicheskoye uchilishche im
Baumana
Moscow Higher Technical College imeni Bauman

NIFKhl
NI fiziko-khimicheskiy institut im Karpova
Scientific Research Institute of Physicochemistry
imeni Karpov

NIIFKS
NII fiziki kondensirovannykh sred Yerevanskogo
gos universiteta
Scientific Research Institute of the Physics of
Condensed Media of Yerevan State University

NIIFRGU
 NII fiziki Rostovskogo gos universiteta
 Scientific Research Institute of Physics of
 Rostov State University
 NIIPFP
 NII prikladnykh fizicheskikh problem pri
 Belorusskom gos universitete
 Scientific Research Institute of Applied Physics
 Problems at Belorussian State University
 NIIYaF
 NII yadernoy fiziki pri Moskovskom gos universitete
 Scientific Research Institute of Nuclear Physics at
 Moscow State University
 NIIYaFT
 NII yadernoy fiziki Tomskogo politekhnicheskoy
 instituta
 Scientific Research Institute of Nuclear Physics
 of Tomsk Polytechnic Institute
 NIKFI
 NI kinofotoinstitut
 Scientific Research Institute of Motion Pictures and
 Photography, Moscow
 NIOPIK
 NII organicheskikh poluproduktov i krasiteley
 Scientific Research Institute of Organic
 Intermediates and Dyes, Moscow
 NIRFI
 NI radiofizicheskiy institut
 Radiophysics Scientific Research Institute, Gor'kiy
 NPOKIANAz
 Nauchno-proizvodstvennoye ob"yedineniye kosmicheskikh
 issledovaniy AN AzSSR
 Scientific Production Association of Space Research,
 Academy of Sciences Azerbaydzhan SSR, Baku
 NSPGAN
 Nauchnyy sovet AN SSSR po probleme "Golografiya"
 Scientific Council on Holography, Academy of Sciences USSR
 OGMI
 Odesskiy gidrometeorologicheskiy institut
 Odessa Hydrometeorological Institute
 OGU
 Odesskiy gos universitet
 Odessa State University
 OIYaI
 Ob"yedinennyy institut yadernykh issledovaniy
 Joint Institute of Nuclear Research, Dubna
 OVIMU
 Odesskoye vyssheye inzhenernoye morskoye uchilishche
 Odessa Higher Marine Engineering College

RRTI

Ryazanskiy radiotekhnicheskiy institut
Ryazan' Radio Engineering Institute

SamGU

Samarkandskiy gos universitet
Samarkand State University

SGU

Saratovskiy gos universitet
Saratov State University

SimGU

Simferopol'skiy gos universitet
Simferopol State University

SKTRAerazol'

Spetsial'noye konstruktorsko-tekhnologicheskoye
byuro "Aerazol'" pri Yerevanskom GU
Aerazol' Special Design and Technology Bureau at
Yerevan State University

TashGU

Tashkentskiy gos universitet
Tashkent State University

ToPI

Tomskiy politekhnicheskiy institut
Tomsk Polytechnic Institute

TsAGI

Tsentral'nyy aerogidrodinamicheskiy institut
Central Institute of Aerohydrodynamics, Ramenskoye

TsNIITEIlegprom

TsNII informatsii i tekhniko-ekonomicheskikh
issledovaniy legkoy promyshlennosti Ministerstva
legkoy promyshlennosti SSSR
Central Scientific Research Institut of Information
and Technical Economic Studies for Light Industry,
Ministry of Light Industry USSR, Moscow

TulPI

Tul'skiy politekhnicheskiy institut
Tula Polytechnic Institute

Ukrqiprom

Ukrainskiy gos institut po proyektirovaniyu
metallurgicheskikh zavodov
Ukrainian State Institute for Planning of
Metallurgical Plants

UkrNIINTI

Ukrainskiy NII nauchno-tekhnicheskoy informatsii i
tekhniko-ekonomicheskikh issledovaniy Gosplana
UkrSSR
Ukrainian Scientific Research Institute of Scientific
and Technical Information and of Technical Economic
Studies for the State Plan of the Ukrainian SSR, Kiev

UkrNIISI
 Ukrainskiy NII stankov i instrumentov
 Ukrainian Scientific Research Institute of Machine
 Tools and Instruments

UrPI
 Ural'skiy politekhnicheskiy institut
 Ural Polytechnical Institute, Sverdlovsk

USKhA
 Ukrainskaya sel'skokhozyaystvennaya akademiya
 Ukrainian Agricultural Academy, Kiev

UzhGU
 Uzhgorodskiy gos universitet
 Uzhgorod State University

VGU
 Voronezhskiy gos universitet
 Voronezh State University

VilGU
 Vil'nyusskiy gos universitet
 Vilnius State University

VINITI
 Vsesoyuznyy institut nauchnoy i tekhnicheskoy
 informatsii
 All-Union Institute of Scientific and Technical
 Information, Moscow

VNIFTRI
 VNII fiziko-tekhnicheskikh i radiotekhnicheskikh
 izmereniy
 All-Union Scientific Research Institute of Physico-
 technical and Radiotechnical Measurements, Moscow

VNIIGBol
 VNII glaznykh bolezney
 All-Union Scientific Research Institute of
 Eye Diseases, Moscow

VNIIIMT
 VNI i ispytatel'nyy institut meditsinskoy tekhniki
 All-Union Scientific Research and Testing Institute
 of Medical Technology, Moscow

VNIIM
 VNII metrologii im Mendeleyeva
 All-Union Scientific Research Institute of Metrology
 imeni Mendeleyev, Leningrad

VNIIOFI
 VNII optiko-fizicheskikh izmereniy
 All-Union Scientific Research Institute of
 Optophysical Measurements, Moscow

VNIKIKhMDz
 Dzerzhinskiy filial VNI i konstruktorskogo
 instituta khimicheskogo mashinostroyeniya
 Dzerzhinsk Branch of the All-Union Scientific
 Research Institute of Chemical Engineering

VNIMI

VNII gornoy geomekhaniki i marksheyderskogo dela
All-Union Scientific Research Institute of Mining
Geomechanics and Surveying

VZITLP

Vsesoyuznyy zaochnyy institut tekstil'noy i
legkoy promyshlennosti
All-Union Correspondence Institute of Textile and
Light Industry, Moscow

VZMI

Vsesoyuznyy zaochnyy mashinostroitel'nyy institut
All-Union Correspondence Institute of Mechanical
Engineering

YeGU

Yerevanskiy gos universitet
Yerevan State University

VI. AUTHOR INDEX

ABDUPATAYEV R	85	ARESHEV I P	22	BARANOV V YU	27,81
ABDUYEV A KH	85	ARIMONDO E	74	BARANOVA I M	25,70
ABLYAZOV R A	39	ARIST L M	64	BARASHEV V A	21
ABRAHAM T O	9	ARSENT'YEV I N	5	BARKOVSKIY L M	18
ABRAMOV O I	46	ARTAMONOV N N	50	BARMASHENKO B D	14
ACHASOV O V	12	ARTENENKO S B	61	BARMENKOV YU O	53
AFANASIADI L SH	25	ARTYUSHENKO V G	35	BARUKOV K A	21
AFANAS'YEV A A	50	ARTYUSHIN L F	39	BARTHEL C	3
AFINOGENOVA YE V	18	ARUTYUNYAN A G	55	BARTHEL U	3
AFONIN YE I	48	ARUTYUNYAN KH S	21	BARTOS M	58
AGALETSKIY P N	91	ARUTYUNYAN R V	21,81	BASHKIN M O	37
AGAL'TSOV A M	28	ARUTYUNYAN V M	21,27,50	BASHKIROV YE K	21
AGANIN A V	17	ASHMONTAS S	70	BASIC R	35
AGESHIN S F	22	ASHUROV M KH	1	BASIYEV T T	1
AGEYEV V A	7	ASINOVSKIY L M	57	BASOV N G	8,11,13,26,88
AGLIULOV YE I	34	ASHKARYAN G A	87	BAULIN N N	61
AGRANOVICH V M	74	ASLANYAN L S	74	BAYDULLAYEVA A	55
AKHEKYAN A M	3	ASNIS L N	61	BAYGULOVA YE K	77
AKHIYEZER A I	31	ASTAF'YEV A V	25	BAZAKUTSA P V	79,85
AKHMEDIYEV N N	23,70	ASTAKHOV A V	16	BAZAROV YE N	35
AKHUNOV N	9	ATANESYAN V G	49	BAZHENOV V V	82
AKIMOVA I V	30	ATAYEV B M	85	BECKER W	71
AKOPYAN R S	48	ATUTOV S N	70	BEDILOV M R	85
AKRAMOVA D SH	54	AUKHADEYEV R R	84	BEKETOVA A K	62
AKSENOV V P	81	AVDEYENKO N S	35	BEKKER A M	62
AKSENOV YE T	28,34,52	AVDEYEVA V I	7	BEKSHAYEV A YA	15
AKTSIPETROV O A	25,70	AVERICHEV YU D	37	BELEN'KIY M S	42,43,91
AKUL'SHINA L G	42	AVERIN V I	82	BELENOV E M	62
ALEKHO A	61	AVER'YANOVA M YU	70	BELEVTSOVA L I	69
ALEKSAKHIN I S	70	AVETISYAN V M	49	BELOKON' M V	1
ALEKSANDROV A L	61	AVRUTSKIY I A	79,85	BELOUSOV A V	21,57
ALEKSANDROV A YU	11	AZARENKOV N A	82	BELOUSOV V I	88
ALEKSANDROV L N	85	AZIZOV S T	82	BELOV A V	34,35
ALEKSANDROV M L	57			BELOV I A	62
ALEKSANDROV S N	21	BABICH L P	87	BELOV N N	62
ALEKSANDROV V V	87	BABIN S A	5	BELOV V V	43
ALEKSANDROV V YE	56	BABIY P I	71	BELOVA G N	28
ALEKSANDROV YU V	57	BABLUMYAN A S	52	BEL'TS V A	43
ALEKSEYEV V V	70	BABONAS G A	28	BELYAKOV G P	43
ALESHIN V S	40	BABURINA I I	78	BELYAROV P I	39
ALEYNIKOV V S	35	BACIU G	30	BELYAYEV V D	2
ALFEROV ZH I	5,85	BADALYAN N N	74	BELYY M U	62
ALIMOV D T	54	BADANYAN N SH	21,27	BENIMETSKAYA L	55
ALIMPIYEV S S	55	BAEHR J	31,61,62	BEN'KOV A V	82
ALIYEV A A	9	BAGAMADOVA A M	85	BER B YA	5
ALKHAZOV G D	55	BAGAYEV S A	35	BEREZHIANI L B	33
ALLIN A P	87	BAGAYEV S N	74	BEREZHIANI M V	33
AL'SHITS YE I	76	BAGINSKIY V M	13	BEREZHNOY A A	62
AL'TSHULER G B	19	BAGIR-ZADE F M	62	BEREZINA T I	30
ANAN'IN O B	87	BAGLIKOV V B	84	BERGER A	81
ANDREYEV A M	28	BAGRATASHVILI V N	55	BERLOVICH E YE	55
ANDREYEV A V	30	BAJIC B	62	BERMAN G P	21
ANDREYEV V I	19	BAKAYEV V G	8	BERSONS I YA	22
ANDREYEV YE P	61	BAKHIR L P	7	BESPAL'KO N V	67
ANDROSOV V P	15	BAKHRAKH L D	91	BESPALOV V G	27
ANDRYUSHIN A I	21	BAKIYEV A M	86	BESPALOV YU I	63
ANH T K	77	BAKLANOV YE V	21	BESSARAB A V	88
ANIKEYEV B V	86	BAKOS J S	9	BESSIONOV YE G	30
ANIKEYEV I YU	27	BAKSIK A	6	BESSIONOV YU L	35
ANISHCHENKO V V	63	BAKUT P A	53,62	BETEROV I M	71
ANISIMOV YU I	83	BALANDIN S F	65	BEYKO V P	79
ANTIPENKO B M	1,2	BALENKO A A	34	BEYSEMBAYEVA KH B	85
ANTIPIN G V	49	BALITSKAS S K	84	BICH V T	77
ANTONEVICH G N	7	BAL'KYAVICHYUS P Y	84	BIRGER YE M	44
ANTONOV V M	53	BALTRAMEYUNAS R	70,74	BIRMONTAS A	29
ANTSIBOR V YA	91	BALYASNIKOVA L G	77	BIRYUKOV A M	61
ANTSIPEROV V YE	50,51	BANAKH V A	42	BIUSURINA I A	83
ANTYUKHOV V V	9	BANDILLA A	31	BLABLA J	58
APANASEVICH P A	50	BANKOVA T V	42	BLAHA V	9
APOLLONOV V V	9	BANNIKOV M T	49	BLATOV I V	61
ARAMYAN A R	50	BARABASH L Z	87	BLINNIKOV YU S	55
AREF'YEV I M	34	BARABASH YU M	53	BLINOV N A	9

BLIZNYUK V V	57	BYKOVA O G	22	DEGTYAREVA V P	58,59
BOBAK W	18	BYKOVSKIY A YU	62	DEMCHENKO N N	88
BOCHKAREV A E	3	BYKOVSKIY YU A	36,82,87,91	DEMCHUK M I	1,7,19,29
BODNER V A	63	BYSTROV YE M	52	DEMENT'YEV A S	84,92
BCETTCHER E H	71			DEM KOVICH I V	80
BOGACHEVA S P	11	CAHA A	16	DEM'YANTSEVA S D	8
BOGDANKEVICH L S	30	CHALENKO N I	44	DENEZHNIKIN YE N	63
BOGOBOYASHCHIIY V V	63	CHALEY A V	54	DENISHCHIK YU S	16
BOGOLYUBOV N N	22	CHALYY V P	5	DENISOV A B	33
BOHMEYER W	9	CHAPLANOV A M	86	DENISOV A YU	64
BOJERIU C A	41	CHAPLYGIN V I	57	DENISOV V I	88
BOKHAN P A	11	CHAYKA A N	52	DENISOV V P	55
BOKUT' B V	18,25	CHAYKO YU V	58	DENUS S	88,90
BOLOTNIKOVA T N	91	CHEBOKIN V K	60	DEPMAN N P	18
BOLOTSKIKH L T	26	CHEBOTAYEV V P	22,71,74	DERBOV V L	22
BOL'SHUNOV A V	33	CHEBUNIN V G	68	DERYUGIN I A	17
BONCH-BRUYEVICH A M	79,82	CHEBURKIN N V	9	DERZHIYEV V I	88
BONDAR M V	6	CHECHUY S N	86	DEV DARIANI O A	57
BONDAR' I I	55	CHEKANOVA T G	64	DEVYATKOV A G	49
BONDARCHUK YA M	19	CHEKAY S	88	DEVYATYKH G G	75
BONDARENKO S V	50	CHERCHES KH A	1	DIANOV YE M	34,35
BONDAREV L A	35	CHEREPA NOV V N	79	DIDENKO I A	79
BONDAREV YE F	52	CHEREPENIN V A	30	DIETEL W	29
BOREYSHO A S	12	CHEKNAY A V	56	DIMAKOV S A	10
BORISENKO A YU	87	CHEKNIGOVSKIY V V	10	DIMOV N A	50
BORISOV A F	35	CHEKNOMORETS M P	13	DIVAK V B	27
BORISOV M	31	CHEKNOV A A	68	DMITRENKO S S	58
BORISOV V M	13,27,81	CHEKNYAK A SH	49	DMITRIK G N	75
BORISOV YE N	32	CHEKNYKH V A	72	DMITRIYEV A K	74
BORNKESSEL W	85	CHEKNYSHEV S M	12	DMITRIYEV A V	63
BORZDOV A N	18	CHEKNYY G P	50	DMITRIYEV V A	84
BORZDOV G N	18	CHEKNYY V V	65	DMITRUK L N	37
BOTH W	35	CHEKVINSKIY L S	34	DNeproVSKIY V S	86
BOYARSKOVA V L	33	CHESHEV YE A	56	DOBRO L F	16
BOYCHUK V V	76	CHIKOLINI A V	34,35	DOBROVOL'SKIY A F	43
BOYKO M S	71	CHIKOVANI R I	4	DOBROVOL'SKIY N A	34
BOYKO S A	22	CHILINGARYAN YU S	74	DOEPEL E	29
BOYKO V	35	CHITAYA K B	72	DOHNALIK T	22
BOYKO V A	88,91	CHIVEL' YU A	90	DOIL'NITSYNA O A	75
BOYKOV V N	57	CHOPORNYAK D B	65,85	DOKUCHAYEV V G	84
BOYTSOV V F	16	CHRISTALL K	36	DOLGALEVA G V	88
BRAGIN B N	87	CHTYROKI I	29	DOLGIKH V A	11
BRAUDE V B	36	CHUBAROV V V	49	DOLGINOV L M	3
BREKHOV YE N	33	CHUBAROV YE P	91	DOLGOLAPTEV A V	56
BRENNER M V	87	CHUDINOV A N	84	DOMBROVSKIY V V	52
BRODE F	36	CHUDINOV A V	5	DONIN V I	13
BRODSKIY I A	63	CHUMAKOV A N	90	DONSKOY YE I	78
BRUNNER W	31	CHUPRYNA V A	19	DOROFLEYEV V G	82
BRYK V YE	32	CHURAKOV V V	23	DOROSH I R	53
BRZHEZINA B	78	CHURBAKOV S V	9	DOROSHCHUK V S	63
BUDKEVICH B A	80	CHURBANOV M F	36	DOVGOSHEY N I	86
BUETTNER E	6,77	CHUYKO V G	91	DRABNER M	61
BUGAYEV V A	11	CTYROKI J	29	DRAKIN A YE	3
BUKATOVA I L	52	CZEKAJ S	88	DRAFAK I T	75
BUKHTOYAROVA N I	62	CZERNEY P	6	DRICHEKO N M	63
BUKOVSKIY B L	58			DROFA A S	44,48
BULANIN V V	10	DABU R V	51	DRUYAN V M	64
BULDAKOV V M	42	DADASHEV R S	91	DRYUZHININA L V	3
BULGAKOV V V	35	DADIVANYAN A K	49	DUBETSKIY B YA	71
BUMYALIS A V Y	86	DAGIS S P	75	DUBININ A A	36
BUNKIN F V	55,56,88	DAMASKIN I A	86	DUBNETSKIY B YA	21
BURAKOV V S	74	DANILOVA G V	88	DUBOVIKOV M S	63
BURMISTROV YU P	53	DANILYCHEV V A	11,13,26	DUBOVIKOVA YE A	63
BURNASHEV M N	58	DANISHEVSKIY A M	71	DUBOV V D	4
BUSSE W	78	DAN'SHCHIKOV YE V	82	DUBROVIN V F	35
BUSURIN V I	36	DASHEVSKIY B YE	58	DUBROVINA T G	17
BUTUSOV M M	16,36,63	DAUSHVILI A M	61	DUBROVSKIY A V	88
BUTYLKIN V S	26	DAVARASHVILI O I	4	DUKHOVNIYY A M	27
BUZYALIS R R	84	DAVYDOV B L	93	DUL'NEVA YE G	19
BYCHKOVA L P	4	DE S T	63	DUMAYEV K M	84
BYKOV A M	12	DEDUSHENKO K B	59	DUMBRAVYANU R V	2
BYKOVA N G	22	DEGTYARENKO K M	25	DVOPETSKIY S A	57

DVORNIKOV I V	14	GALANIN M D	31	GORODETSKIY A N	64
D'YACHKINA A V	17	GALKIN S L	16	GOROKHOVSKIY A A	75
DYNSHAKOV V A	82	GALL' L N	56	GORSHKOV B G	64
DZHANGOBEGOV R P	92	GAL'PERN A D	53	GORSHKOV V N	73
EBERT W	8	GAN'SHIN V A	37	GORYACHEV S B	12
EFENDIYEV T SH	6	GAPONOV S V	88	GRABCHIKOV A S	15
EICKHOFF K D	71	GAPRINDASHVILI KH I	92	GRACHEV A P	59
ELISASHVILI D T	65	GARBUZOV D Z	5	GRANOVSKIY A B	19
ESHKOBILOV N B	73	GARGER YE K	44	GRENKOV V L	61
FABELINSKIY V I	55	GASE R	58	GRIBKOV V A	88
FABRIKANT V A	31	GAUBAS E	74	GRIKOVSKIY V P	24
FABRIKOV V A	17	GAVALESHKO N P	71	GRIMBLATOV V M	15
FADEYEV V V	49	GAVRIKOV V K	80	GRINSHTEYN M L	37
FAM LE KIEN	22	GAWLIK W	75	GRODNEV I I	36,92
FAM LE KIYEN	22	GAYSAK M I	56	GROMOV A I	87
FARADZHEV B G	22	GEGIADZE G G	4	GROMOV B I	82,83
FARAKHUTDINOVA M A	63	GEL'MEDOVA L A	88	GUBENKO S I	83
FARNY YU	90	GENKIN S A	64	GUDYALIS V V	75
FASOLD D	36	GEORGIYEVA V B	33	GUETHER R	17
FATEYEV N V	71	GEORGOBIANI A N	64	GUL'BINAS I A	84
FAYNER N I	64	GERDZHNIKOV M	31	GUL'BINAS V	20,60
FAYZULLOV T F	75	GERKE R R	17	GUL'KO V M	89
FEDORCHENKO A M	11	GERMANOVICH V I	86	GULYAYEV R G	4
FEDORIV R F	41	GERSHENZON YU M	68	GUMLICH H E	78
FEDOROV E G	39	GERTS S YU	13	GUPALOV V I	65
FEDOROV G M	42,65,85	GES' I A	80	GURENKO V A	40
FEDOROV M V	21	GESCHKE S	58	GUREVICH G S	44
FEDOROV P P	2	GEVORKYAN E V	28	GUREVICH S A	4
FEDOROV V B	1,41	GIESSMANN H G	33	GUREVICH V Z	35
FEDOROV YU F	5	GIFEYSMAN SH N	2	GURILEV O M	34
FEDOROVICH O V	85	GILEV A K	1,29	GURVICH L O	83
FEDOSEYEV D V	80	GILEV I S	37	GUR'YANOV A N	35
FEDOSEYEV S A	86	GINZBURG N S	30	GUSAKOV G M	2
FEDOSEYEV V B	64	GINZBURG V M	28	GUSEV O N	63
FEDOSEYEV V N	77	GLADYSHEV V G	5	GUSEV V G	65
FEDULEYEV B V	53	GLEBOV A S	1,2	GUSEV YU M	37
FEL'DMAN G G	66	GLEBOV L B	84	GUSHCHIN YE M	19
FEOFILOV P P	31	GLOVA A F	9	GUS'KOV S YU	88,89,90
FERDINANDOV E	44	GLUSHKO A I	64	GUSOVSKIY D D	35
FEYGIN V M	95	GLYADKOVSKIY V I	78	GUSSAK YA D	68
FILIMONOV D A	80	GNATENKO YU P	71	GUTKIN T I	37
FILINOV V N	50	GOEDE O	71	GUTOP YU V	23
FILIPPOV A A	28	GOEPEL K	37	GUZENKO G A	37
FILIPPOV S S	9	GOL'BERG S M	80	HAERTIG TH	37
FIRSOV K N	9	GOL'DENBERG S U	37	HANTKE D	58
FISCHER R	31	GOL'DIN G S	78	HARNISCH B	65
FISHKIN R V	49	GOLDOBIN I S	4,5	HAUBENREISSER W	65
FLYAGIN A V	44	GOLIK L L	52	HEHL K	36
FOERSTER G	37	GOLOVIN A F	83	HEIMBRODT W	71
FOK M V	95	GOLOVINA A P	64	HENNEBERGER J	81
FOMIN N A	12	GOLOVINSKIY P M	13	HERRMANN K	3
FOMIN V V	58	GOLTVYANSKAYA G F	29	HERRMANN R	76
FOMINSKIY V YU	82	GOLUBENKO I V	17	HERRMANN J	56
FOMINYKH N N	25	GOLUBEV A A	87	HEUMANN E	18
FRANCINI R	75	GOLUBEV V V	20	HEUNEMANN L	94
FRANCKE K P	9	GOLUBEV YU M	26	HOFMANN C	92
FRANTSESSON A V	17	GOLUBEVA S G	63	HORDWIG W	92
FREYBERG A M	79	GOLUBTSOV A A	84	HORN G	59
FREZINSKIY B YA	46	GOLYANSKAYA L M	64	HULTZSCH R	6
FRIDMAN S A	95	GOMONAY A I	55	IGNAT'YEV A G	61
FRISHMAN F	68	GOMZIN V N	36	IGNAT'YEVA L A	23
FRITZSCHE K	37	GONCHAROV E G	49	IL'IN D V	90
FROEHLICH D	75	GONCHAROV I G	59	IL'IN S D	68
FROMM V A	83	GONOR A L	64	IL'IN V G	37,38
FRONDZEY I YA	87	GORBACHEV V N	26	IL'IN V M	34
GADZHIYEV Z I	75	GORBAN' I S	13	IL'INSKAYA T A	65
GAFUROV KH G	7	GORBUNKOV M V	59	IL'INSKIY YU A	21,24
GAGARIN A P	82	GORDEYEV A A	27	IMAS YA A	79,82
GALAKTIONOV V A	55	GORELIK A V	32	IOFFE V B	56
		GORELIK V S	27,28,75	IOGENSEN L V	38,65
		GORIN YU N	95		
		GORLOVA I G	71		

IONIKH R A	39	KARI'OV F CH	69	KISELEVA T I	2
IONIN A A	8	KARLOV N V	55,72	KISHKOVICH O P	68
ISAKOV A I	88,90	KARLSEN G G	46	KLIM B P	41
ISAYEV A A	12	KARNAUKHOV A A	90	KLIMENKO I S	53
ISAYEV V I	52	KARNAUKHOV N V	54	KLIMKIN V M	76
ISHCHENKO A A	1,19	KARNAUKHOV YE N	73	KLIMKOV YU M	65,93
ISHKHANYAN S P	50	KARPOV S YU	4	KLIMOV I I	40
ISMAILOV I	4	KARPOV V YA	88	KLIMOVA L G	65
ISMAILOV T K	92,93	KARPOVICH I A	72	KLYACHKIN L YE	38
IVAKIN YE V	50	KARPUKHIN V T	12	KNAYPP K	75
IVANCHENKO I V	15	KARULE E M	56	KNOCHE H	33
IVANENKO M M	23	KASHENTSEV B P	48	KOCH E O	15
IVANOV A P	49,95	KASHUBA V A	33	KOCH R	76
IVANOV A V	20,35	KASK N YE	65,85	KOCHANOV V P	79
IVANOV E I	76	KATASONOV V I	39	KOCHAROVSKAYA O A	16,23
IVANOV I YE	76	KATSEV I L	49,95	KOCHELAP V A	13
IVANOV S V	33	KATSEVICH S P	7	KOCHEMASOV G G	88
IVANOV S V	65	KÅUL' B V	44	KOEHLER W	66
IVANOV V A	24	KAUPLYAUSKIS Z Y	12	KOENIG R	6,13
IVANOV V M	64	KAVTREV A F	53	KOGAN A YA	68
IVANOV V N	65	KAZAK V L	65	KOGAN V YE	92
IVANOV V V	39	KAZAKEVICH V V	52,93	KOGAN YA D	56
IVANOV YE V	43	KAZAKOV A YE	21	KOKUSHKIN A M	14
IVANOV-OMSKIY V I	63	KAZANSKIY P G	38,72	KOLAROV G	44
IVANOVA I M	64	KEBEDZHIEV A G	34	KOLDUNOV M F	80
IVANOVA YE G	13	KEBEDZHIYEV A G	38	KOLEDOV V V	71
IVANYUK A M	2	KELAREV YE L	87	KOLEROV A N	79
IVLEV G D	80	KEL'BALIKHANOV B F	65	KOLESNIK A I	49
IZMAYLOV I A	13	KELOGLU O YU	21	KOLESNIKOV A P	69
		KEMPE N	6,77	KOLESOV V S	19
JANKE M	38	KERIMOV O M	11,13	KOLOMENSKIY A A	28
JANKIEWICZ Z	18	KHABIBULLAYEV P K	1,54,85	KOLOSOV YE YE	72
JANKO P	77	KHABIBULLAYEVA P K	54	KOLOVSKIY A R	21
JISKRA J	9	KHALEVSKIY V Z	64	KOLPAKOV YE V	78
JUETTE A	33,34	KHALTURIN V I	41	KOMARNITSKIY A A	2
JURGEIT R	17	KHAMZIN Z Z	80	KOMAROV K P	16
JURKOWSKA K	77	KHANDOGIN V A	63	KOMAROVSKIY V A	73
		KHANIN YA I	16,32	KOMLYAKOV V V	19
KABELKA V	20,60	KHAPLANOVA N YE	80	KOMOLOV V L	86
KABELKA V I	50	KHAPOV YU I	13	KONDRASHOV S V	12
KACHER I E	86	KHARCHEV A V	3	KONDRATENKO A N	82
KACHURIN O R	9	KHARLAMOV B M	76	KONDRAT'YEV YU N	37
KADYSHEVICH YE A	44	KHARUTO A V	19	KONDRATYUK N V	6
KAGAN V D	27	KHATIN G A	64	KONONOV A V	12,89
KAGAYN V E	46	KHAYDAROV R T	87	KONOV V I	85,89
KALABUSHKIN O I	83	KHETSHCHINASCHWILI D	20	KONOVALENKO YU V	80
KALACHEV N V	88	KHIL'CHENKO A D	69	KONYAYEV V P	35
KALIN A A	82,83	KHILO N A	25	KOPERSKI J	22
KALININ I I	49	KHILO P A	25	KOPOVSKIY A A	28
KALININ YU M	20	KHLOPKOV YU V	7	KOPRANENKOV V N	76
KALININA I V	53	KHOLODENKOV L YE	72	KOPYLOV YU L	20
KALININA YE V	86	KHOLODNOV YE V	83	KOPYLOVA T N	25
KALINUSHKIN V P	64	KHOLOPTSEV N N	44	KOPYSOV I A	90
KALITAYEVSKIY N I	31	KHOMUTOV A YU	75	KOREN' N N	4
KALITIN S A	57	KHOPIN V F	34,35	KORENEVA L G	93
KALUGIN YU N	67	KHOPOV V V	61	KORKISHKO YU N	37
KALYUZHNYA G A	81	KHORENYAN R G	37	KORN G	17
KAMACH YU E	18	KHRISTOFOROV O B	13	KORNETOV V N	84
KAMINSKIY A A	2,72	KHRUMUSHIN V A	38	KORNEYCHUK V I	88
KAMINSKIY V A	57	KHRUSTALEV A A	20	KORNEYEV V I	23
KAMPF R	65	KHUDAVERDYAN A M	89	KORNIYENKO A A	50
KANAVETS V I	30	KHURKHULU YU S	59	KOROBENNIKOV V P	93
KANDIDOV V P	29	KIDYAROV B I	75	KOROBKIN V V	5,89
KANSY W	10,36	KILIN S YA	50	KOROBV V A	72
KANTSYREV V L	87	KIRAKOSYANTS V YE	44	KOROBV V K	91
KAPORSKIY L N	79,83	KIRICHENKO N A	55,56	KOROLEV YU D	64
KAPUSTIN V P	18	KIRIK YU M	35	KOROSTELIN YU V	3
KARABANOV A YU	71	KIRIL'CHIK T F	65	KOROTAYEV O N	78
KARABUTOV A A	19	KIRILLOV G A	88	KOROTAYEVA YE A	76
KARASIK A YA	27	KIRILLOV V I	37	KOROTKOV P A	75
KARASIK V YE	93	KIRYUKHIN YU B	27,81	KORSHUNOV V A	44
KARIMBAYEV D D	20	KISELEV G L	50	KORSHUNOV V V	72

KORSUNSKAYA N YE	55	KUDRYASHOVA V V	11	LEBEDEVA V V	22
KORZHENEVSKIY A V	30	KUDRYAVTSEV N N	12	LEBO I G	89
KOSAREV A A	18	KUGLER G	65	LEDERER F	23
KOSENKO YE K	84	KUKHAREV A V	28	LEHMANN J	65
KOSHPARENOK V N	15	KUKHTA A V	35	LEKSINA YE G	65,85
KOSICHKIN YU V	75	KUKHTAREV N V	50	LEMBERSKIY V B	49
KOSITSYN V YE	8	KUL'CHIN YU N	66	LEMMERMAN G YU	12
KOSOBUKIN V A	83	KULESHOV N V	57	LEND'YEL V I	56
KOSOBURD T P	48	KULEVICHYUS CH	74	LEONOV A P	74
KOSTENICH YU V	17	KULEVSKIY L A	60	LEONOV YE I	28,52,72
KOSTERIN A G	45	KULIKAUSKAS V S	82	LEONOV YU S	89
KOSTKO O K	45,48	KULIKOV YU V	59	LEONT'YEV I A	9
KOSYREV F K	83	KULISH V V	31	LEONT'YEV V G	19
KOTIBNIKOV M A	24	KULYA S V	7,27	LERNER P B	72
KOTLYAROV V P	80	KUNAYEV A M	93	LESHCHINSKIY L K	83
KOTOMTSEVA L A	19	KUNEV V G	34	LETOKHOV V S	32,55
KOTOV O I	67	KUNIN V YA	20	LEVASH L V	61
KOVAL'CHUK YU V	51,70	KUOKSHTIS E	70	LEVASHENKO G I	7
	85,86	KUPLYAUSKENE A V	12	LEVANSKIY V V	85
KOVALENKO L G	49	KUPOCHENKO L F	29	LEVIN I M	49
KOVALEV A A	54	KURAMSHINA G M	78	LEVKOVSKIY A A	90
KOVALEV A M	83	KURATAYEV I I	2	LEYKIN M V	63
KOVALEV D V	29	KURBANOV K	2	LIBENSON M N	79,82,86
KOVAL'SKIY N G	87	KURBATOV L N	66	LIDER K F	72
KOVALYUK Z D	86	KURDYUMOV S P	55	LIEBSCHER H J	81
KOVARSKIY V A	21,93	KURIN A F	30	LIKHACHEV I G	59
KOVSH I B	8	KURKOV A S	35	LINDNER H	33
KOZANECKI A	86	KURNYAVKO YU V	5	LIPOVSKAYA L A	61
KOZEL S M	38	KUROCHKIN A P	91	LIPOVSKAYA M YU	34,52
KOZHEVNIKOV N M	53	KUROVA I A	72	LIPOVSKIY A A	34
KOZICH V P	15	KUSCH S	18,52	LIPSKIY V V	19
KOZLOV S N	50	KUSHNIR V D	48	LISENKOV A A	8
KOZLOVSKIY S I	72	KUSIMOV S T	50	LISICHENKO V I	56
KOZLOVSKIY V I	3	KUTAKHOV V P	64	LISITSA M P	22
KOZYREV A V	64	KUTASOV V A	39	LISITSYN V M	66
KRASHENINNIKOVA TI	30	KUVALKIN D G	61	LISTVIN V N	38
KRASNER YU G	50	KUVSHINSKIY N G	53	LITVINOV V M	62
KRASNOV O A	44	KUZILIN YU YE	51	LITVINOV YU V	66
KRASOVSKIY A N	57	KUZ'MIN M V	55	LIVSHITS M G	73
KRASOVSKIY V V	5	KUZ'MIN V S	76	LOBUREV S V	87
KRAVCHENKO V B	20	KUZNETSOV A A	8	LOGINOV V A	44,51
KRAVCHENKO V I	5,15	KUZNETSOV F A	64	LOPAREV A N	83
KRAVTSOV S B	1	KUZNETSOV F K	4	LOPATINA L B	38
KRAVTSOV YU A	27	KUZNETSOV M S	83	LOSKUTOV A YU	70
KRECKLOW B	38	KUZNETSOV M V	62	LOYKO N A	19
KREKOV G M	43	KUZNETSOV V V	50	LOZOVVOY V I	61
KREMENCHUGSKIY L S	61	KUZNETSOV YU G	68	LUCHNIKOV A V	27
KREMENETSKIY S D	91	KUZYAKOV YU YA	57	LUEMKEMANN B	59
KREMEZ A S	38	KVACH V V	15	LUGINA A S	25
KREMNEV L S	83	LABUDA S A	12	LUKIN A A	69
KRESS D	38	LADEMANN J	13	LUKIN V I	39
KREYNGOL'D F I	72	LAGUCHEV A S	72	LUKIN V P	45,46,91
KRIKSUNOV L Z	41	LAGUNTSOV N I	57	LUKIYANETS B A	76
KRIKUNOV G A	45	LAKHTIN YU M	56	LUK'YANCHUK B S	56,72
KRINDACH D P	7	LALOV I Y	74	LUK'YANOV S YU	93
KRIVOLAPCHUK V V	73	LANGBEIN U	23	LUK'YANOV V N	4
KRIVOSHEVEV M I	35	LANGE I	39	LUSKINOVICH P N	62
KROBKA N I	32	LAPTEV V V	1	L'VOV K M	55
KROKHIN O N	88	LARIN YU T	38,92	L'VOV V I	14
KROL J	14	LARIONTSEV YE G	29	LYAKHOVETSKIY L S	64
KROO N	62	LARYUSHIN A I	32	LYAMTSEV M L	28
KRUGLYAKOV E P	69	LASHKOV G I	53	LYASHENKO YE I	83
KRUMLIKOVA N I	37	LAVRIK N L	76	LYSENKO B M	42
KRUPMAN YU G	64	LAVRIK V V	23	LYSENKO V G	72
KRYLOV I R	76	LAVRUSHIN B M	4	LYTKIN A P	8
KRYLOV P S	58	LAZAREV M D	58	LYUBCHENKO O S	89
KRYUCHKOV S I	12	LAZARUK A M	51	LYUBOVTSSEV V B	34
KUBRINSKAYA M E	37	LEBEDEV A N	19	LYUTOMSKIY V A	61
KUCHA V V	20	LEBEDEV F V	9,82		
KUCHAYEV A V	8	LEBEDEV M V	72	MAK A A	56
KUCHERENKO I A	66	LEBEDEV V B	66	MAKARETSKIY YE A	39
KUDINOVA M A	1	LEBEDEV V F	12	MAKAROV A I	32

MAKAROV G N	56	MIGOLINETS I M	86	NABIYEV R F	4
MAKAROV V I	18	MIKHALEVICH V G	28	NABIYEV SH SH	77
MAKEYEV S A	37	MIKHAYLOV A V	50	NADEZHDINSKIY A I	75
MAKHANEK A G	72	MIKHAYLOV S I	27	NAGRABA S	90
MAKIN V S	82	MIKHAYLOV V P	1,7,19,29	NAKAIDZE D M	92
MAKKAVEYEV V I	39	MIKHAYLOV YU A	88	NAKHODKIN N G	53
MAKSIMOV G A	75	MIKHEYEV P A	39	NAKORYAKOV V YE	74
MAKUSHKIN YU S	79	MIKULENOK A V	64	NALIMOV I P	53
MALAKHOVA V I	4	MILANICH A I	13	NARSIYA N SH	33
MALAKHOVSKIY V S	33	MILYUTIN YE R	46	NASEDKIN YU V	43
MALASHONOK V A	74	MIN'KO L YA	83,90	NASEL'SKIY S P	2
MALDUTIS E K	84	MINOGIN V G	73	NASIBOV A S	3,4
MALETS A V	66	MINOR U C	18,52	NASONOV V I	83
MALETS YE B	66	MINTSYAVICHYUS V YU	75	NASYROV G F	88
MALEZHENKOV V V	41	MIRONOS A V	36	NASYPOV I N	1
MALININ A N	13	MIRONOV A B	27	NAUMENKO N A	9
MALKHASYAN R T	68	MIRONOV A V	25,58	NAUMOV V V	67
MALKIN A I	68	MIRONOV G V	25	NAUMOVA T M	76
MALOV A P	39	MIRONOV V L	42,43,46,91	NAZARENKO G I	69
MALOV L R	77	MIROV S B	1	NAZARKIN A V	42
MAL'TSEV A A	77	MIROVITSKIY D I	35	NAZAROV A U	15
MAL'TSEV G N	50	MISHCHENKO T V	88	NAZAROV V D	39
MAL'TSEV V V	17	MISHCHUK V YE	94	NAZARYAN A A	49
MAL'TSEVA N V	37	MISHINA YE D	70	NEBAUER E	80
MALYARENKO A M	38	MISHKINIS YU	74	NECHAYEV S V	74
MALYSHEV B N	33	MISS D G	41	NECHITAYLO V S	84
MALYSHEV V N	32	MITAUER S YA	83	NEFEDOV A P	66
MALYSHEVA V S	87	MITROKHIN A V	61	NEGIN A YE	62
MAMAYEV A N	59	MITSEL' A A	48	NEKHAYENKO V A	7
MAMCHUR M	90	MITSEV TS	44	NEKRASOV A I	53
MAMEDOV T S	81	MITYAGIN YU A	73	NEKRASOV YU V	74
MAMONTOV A N	82	MITYAKOV V G	41	NEMENOV M I	21
MAMYRIN B A	56	MITYURICH G S	18	NEOFITNYY M V	51
MANDROSOV V I	53,62	MNATSAKANYAN A O	55	NEPORENT B S	7,27
MANENKOV A A	84	MOCHALKINA O R	87	NESTERENKO P N	64
MARDAR' V YA	63	MOIN M D	72	NESTEROV S I	4
MARICHEV V N	48	MOISEYENKO V N	28	NESTEROV V V	39
MARIMONT YU I	35	MOKHNATYUK A A	55	NEUSTRUYEV V B	34,35
MARIN M YU	89	MOKHOV A V	66	NEVDAKH V V	10
MARKOV F V	69	MOLIN YU N	94	NEVOLIN V N	82,91
MARKOV P I	68	MOLODTSOV S N	42	NEZHENTSEV B YU	10
MARTI L	61,66	MONASTYRSKIY M A	59	NGOC T	77
MARTIN D	30	MONOSOV YA A	71	NGUYEN T Z	10
MARUGIN A V	3	MONOZON B S	23	NGUYEN VINH QUANG	73
MAR'YENKOV A A	39	MORENO A	61	NICKLES P V	18
MASALOV A V	20,60	MORICHEV I YE	41,52	NICULESCU V	30
MASHTAKOV D M	32,33	MOROZOV A V	12	NIKIFOROV S M	28,55
MASLENNIKOV V L	79	MOROZOV S V	35	NIKITENKO A I	87
MASLYUKOV A P	84	MOROZOV V A	23	NIKITIN P I	89
MASYCHEV V I	35	MOROZOV V N	52,60	NIKITIN S YU	77
MATORIN I I	32	MOROZOV YU B	57	NIKITINA T F	87
MATVEYEV A Z	51	MORSHNEV S K	17	NIKOLAYEV V M	67
MATYAS E YE	4	MORY S	6	NIKOLAYEVA V P	69
MATYUSHIN G A	84	MORYASHCHEV S F	83	NIKOL'SKIY YU N	59
MAYOROV S A	88	MOSKALENKO A V	61	NIKOMOROV N V	84
MAYOROVA M V	1	MOSKALEV B A	39	NIKULIN A A	25
MAZAYEV N V	7	MOTKOV V A	34	NIKULIN N G	88
MAZURENKO YU T	53	MOTYAGIN V A	62	NIKULIN V YA	88
MAZUROV I V	44,49	MOZOL' P YE	55	NINOYAN ZH O	49
MEDVEDEVA V K	54	MRUZ V	90	NITOIU A	30
MEKHANNIKOV A I	67,91	MUELLER H	85	NOKOTYAN V YE	46
MELAN'INA T M	38	MUELLER H U	76	NOVAK V P	70
MELEZHIK P N	15	MUELLER R	36	NOVIKOV A D	22
MELIK-SARKISYAN A A	49	MUKHIN V A	74	NOVIKOV A S	45
MEL'NIKOV S YU	39	MUKHTAROV R I	77	NOVIKOV S S	12
MEL'TSIN A L	57	MURASKAS E YA	86	NOVIKOV V K	2
MENGEL B	76	MURIN D I	64	NOVODEREZHKN V I	9
MERSHAVKA V K	69	MURUGOV V M	88	NOVODVORSKIY O A	57
MERZLIKIN S K	26	MURZIN V N	73	NOVOKHATKO S M	39
MESHKOV O I	69	MUSAYEV SH M	75		
MESHKOVSKIY I K	19	MYAKININ V A	42	OBANIN V YU	18
MIERZECKI R	77	MYZNIKOV YU F	11	OBIDIN A Z	4

OBRATZTSOV A P	56	FAVLOVSKIY D A	38	POHL U W	78
OBUKHOV A S	91	FAVLOVSKIY V N	24	POKASOV V V	46,47,91
OGANESYAN A T	49	PAVLYCHEVA N K	77	POKATASHKIN V I	57
OGANESYAN R G	49	PAVLYUK I M	69	POKHSRAPHAN F M	26
OGANESYAN R O	49	PAWLAK J	67	POKHOVSKIY YU A	67
OGANESYAN S G	30	PAZDERSKIY V A	72	POLIFARPOV I V	73
OGANESYAN V A	55	PECHENOV A K	4,30	POLISSKIY G N	55
OGNEV A N	84	PECHENOV A S	50	POLIVANOV YU N	75
OGNEV L I	29	PEKAPSKIY D YE	34	POLOGRUDOV V V	73
OKHRIMENKO B A	62	PELEVIN V N	46	POLONSKIY I YA	89
OKISHEV A V	19	PEL'MENEV A G	10	POL'SKIY YU YE	17,84
OKSMAN YA A	74	PENKIN N P	73	POLUKHIN A T	35
OLEYNIK V I	66	PENTIN YU A	78	POLYAKOV A G	55
OMEL'YANENKO A D	63	PEPEPECHKO V K	39	POLYAKOV YE V	49
ONISHCHENKO N S	23	PERLIN YE YU	71	POLYANINOV A V	87
ONOPKO V V	86	PERLIN YU YE	2	POLYANINSKIY A V	67
ORLOV M YU	94	PEROV P I	52	POLYGALOV G-A	87
ORLOV V M	72	PERSONOV R I	76	POLZE S	17
ORLOVA I N	61	PERTHEL R	65	POMPE W	83
ORLOVICH V A	15	PESCHEL C	6,77	PONATH H E	23
ORMONT N N	72	PETNIKOVA V M	77	PONOMAREVO A G	10
OROBINSKIY S P	37	PETPENKO V R	63	PONOMAREV A N	61
ORZEGOWSKI H	77	PETRINA D M	56	POPENKO M A	15
OSADCHIY V YU	43	PETROSYAN A A	74	POPETSCHIT W	71
OSAD'KO I S	77	PETROSYAN K R	26	POPKOV A F	89
OSELEDCHIK YU S	23	PETROV A K	94	POPKOV V G	26
OSERED'KO S A	80	PETROV A S	17	POPKOV YU F	15
OSIKO V V	1	PETPOV D V	29	POPOV A E	25
OSIPOV A I	28	PETROV G D	67,91	POPOV A K	26
OSIFOV YU V	73	PETROV M YU	61	POPOV B N	84
OSTAPENKO N A	64	PETPOV V F	10	POPOV F F	49
OSTROVOY YU D	53	PETPOV V S	17	POPOV S I	42
OSTROVSKAYA G V	51	PETPOV YU N	72	POPOV V F	95
OSTROVSKIY YU I	61,66	PETROVIC R	39	POPOV YU M	3,4,60
OVANDER L N	23,24	PETROVSKIY G T	84	POPOV YU V	61
OVCHINNIKOV I M	66	PETRUKHIN A I	83	POPOVA L V	80
OVCHINNIKOV I V	77	PETRUNICHEV V A	83	POPTASOV V S	45
OVCHINNIKOV V M	18	PETRUN'KIN V YU	28	PORONOV YE L	4
CVILKO G G	39	PETRYAKOV V A	63	POTEREBNO T A	1
CVOD V I	67	PETSKUS A M	86	POTHEL' A L A	57
CVPUTSKIY G D	34	PEYEVA K A	20	POTOVALOV V YE	60
OZOLIN'SH D A	70	PFEIL G	81	POTENKIN A K	32
OZOLS A O	54	PHILIPP H	58	POYELINCHUF A YE	15
		PIASECKI S	67	PRAKHAZHENSKIY M A	54,57
FADURETS G I	39	FILIFETSKIY N F	26,84,95	PRAKHAZHENSKIY N S	22,88
FAISOV V N	8	FILIPPO D I	67	PREFEINAT F	76
FAK G T	60	FILIPPOVICH V A	85	PREFEINAT F L L	27
FAKHOMOV I I	93	FIL'SKIY V I	89	PREFEINAT V G	61
PAL'M V	78	FILYUGIN N N	61	PRESCHENIA G V	86
PAL'M V V	75	FINENOV YU D	51	PRIVALOV V YE	58
PANAYOTOV K P	20	PIMKIN K V	34	PRIVALOVA T A	2
PANCHENKO V YA	28	PINCHUK S D	42,46	PRIVORONCHENKO A A	34
PANFILOV V N	94	PIOTROWSKI J	14	PRIVORONCHENKO A M	1,9,59,60,61
PANTELEYEV V N	55	PIPCH I I	83		64,72,75,79
PAFAZYAN T A	50	PISYAESEAS A	29		84,85,89,94
PAPGUSOK D	94	PIS'MENNYI V A	2		
PAPP V F Z	13	PIVOVAR V A	14	PRELOV V V	29
PARKHOMENKO YU N	15	PLACHY J	16	PREKOBYEVA ZH S	85
PAPPAPOV A S	49	PLAGWITZ M	40	PREKLI'YEV V YE	12
PARUSIMOV V G	67	PLATONENKO V T	19,29	PREON'KIN A I	64
PASHAYEV A M	92	PLATONOV V N	58,59,61	PRETR'YEV G	87
PASHININ P P	55	PLATONOV YE M	54	PREWAGEL S	67
PASSIA H	67	PREFRANOV G D	65	PREWAGEL S C	51
PAUL H	31	PRESHANOV S A	72	PREWAGEL V V	6
PAVEL'YEV V G	15	PLETNEVA N I	41,52	PRENITIN V I	40
PAVLENKO A V	28	PLIYEV A YE	41	PREKOV S P	82
PAVLOV A F	34	PLONICHENKO V G	36	PREKOV K A	74
PAVLOV B A	67	POCHAPSKIY YE P	41	PREKREIN A A	57
PAVLOV I V	67	PODRUGINA V D	72	PUSHEIN S R	91
PAVLOVA L N	43	POD'YACHEN S P	73	POTGOVONT V I	91
PAVLOVA V T	79	POFHIEP M	15	POTLIN A M	52
PAVLOVICH V S	19	POGHILISHIY YU V	27,70,85	POT' A I	83
				POTUBA A I	39

PYATNITSKIY L N	89	RUMYANTSEV YU M	64	SEMENOV N A	38
PYSHKIN S L	86	RYABOV A I	2	SEMIBALAMUT V M	74
PYURBEYEV A D	71	RYABOV A S	17	SEMIBRATOV M N	95
		RYABOV S G	94	SENDER V R	6
RAAB P	39	RYABUKHO V P	53	SEN'K A V	88
RABA O B	2	RYAFGLOV N F	15	SEN'KO V V	64
RABE H	2	RYAZANOV A V	82	SENTIKMAY ZH	62
RABKIN L M	78	RYAZANOV I B	38	SERDYUCHENKO YU N	60
RADAUTSAN S I	64	PYCHEOV G YE	78	SEREBRENNIKOV L V	77
RADCHENKO P S	75	RYL'KOV V V	56	SEREBRYAKOV V A	69
RADIN A G	50	PYTAZANOV G V	87	SERGEYEV A B	60
RADU A	30	PYVKIN B S	21	SERGEYEV V N	66
RAGOZIN D S	12	RZEWUSKI H	86	SERGEYEV V P	35
RAKHOV A V	69			SERGEYEV YU YA	55
RAKUSH V V	2	SABITOV SH N	94	SERGUSHCHENKO S A	53
RASPOPOV S F	78	SABOTINOV N	12	SERIKOV V V	37
RATNER O V	53	SADKO N P	39	SERRA R	61,66
RAVICH V N	66	SAFIULLINA S S	37	SHABANOV V F	78
RAYS B G	37	SAFONOV S A	74	SHABANOV YE A	83
REBANE K K	78	SAGADEYEVA T G	83	SHAFFRAN'OSH I I	70
RED'KO T P	32	SAGAYDACHNYY YU M	61	SHAGOV A A	6
RED'KO V P	40	SAGINURI M I	4	SHAKHNAZARYAN N V	21,27,55
REICHEL V	68	SAICHEV A I	45	SHAKHOV S I	63
REISSE G	81	SAKALAUSKAS S V	84	SHAKHVERDOV P A	2
REMIZOV N V	38	SALYADIONV V S	83	SHALAGIN A M	70,73
REMIZOV S A	61	SALYUK V A	32,33	SHALAYEV V M	26
REMIZOVA YE I	28	SAMARIN A YU	11	SHALYAYEV M F	26
REMPEL CH	58	SAMARSKIY A A	55,88	SHAMAYEV O B	87
RENTSCH S	20	SAMEL'SON G M	46	SHAMRAYEV B N	87
RESHETOV V A	24	SAMOKHVALOV A V	25	SHANDARIS V I	28
RESHETOV V I	30	SAMOKISH S A	66	SHANDYBINA G D	79,82,86
RESHETOVA L YE	30	SAMOTUCIN S S	83	SHAPKIN P V	3,30
REYNFELDE M YA	54	SAMSON A M	19	SHARIKHIN V F	57
REZA A A	28	SAMSON A V	70	SHARKOV B YU	87
REZNIKOV B L	69	SAMSON B A	50	SHARKOV V F	12
RINKEVICHYUS B S	68	SAMSONOVA L G	25	SHAROV A M	52
RIVLIN L A	3	SANDOW E	80	SHASHIN V I	40
RODIN A M	28	SAPONDZHYAN S O	24	SHATALIN S V	38
RODIONOV A N	40	SARKISYAN D G	24	SHATALOV F A	40
RODIONOV N B	12	SARKISYAN S S	2	SHCHAPIN S M	75
RODIONOV YE P	18	SARTAKOV B G	55	SHCHEDRIN A I	13
ROGACHEV V G	88	SARUKHANOV YU A	35	SHCHEGLOV V A	14
ROGOV V S	42	SASLAVSKIY V YA	51	SHCHEGLOV V N	12
ROKOTYAN V YE	42	SATAROVA M A	2	SHCHEGOL'KOV YU B	44
ROMANCHENKO P M	39	SAVCHENKO M A	23	SHCHELEV M YA	58,59,60,61
ROMANOV A B	23	SAVCHENKO V F	16	SHCHEMELEV V N	60
ROMANOV G S	90	SAVENKOVA T N	35	SHCHEPAKIN K M	40
ROMANOV I M	80	SAVITSKIY G M	17	SHCHERBAKOV I A	1,3
ROMANOV N P	44,47	SAYENKO V A	89	SHCHERBAKOV I V	23
ROMANOV YU A	68	SAYKO A P	76	SHCHEPBAKOV YE A	35
ROSENFELD A	6	SAZANOVICH V M	43	SHCHETNEV YU F	69
ROSHKO V V	13	SCHASTAK S	18	SHEDENKOV S I	74
ROZANOV V B	88,89,90	SCHIFFER F	85	SHEFER A D	78
ROZENSHTEYN A	68	SCHLAWATZKY H	58	SHELEPIN L A	81
ROZENSHTEYN V B	68	SCHMIDT W F	71	SHELEVCOY K D	47
ROZHANSKIY V N	68	SCHROEDEL G	34	SHELYAKIN A A	5
ROZHDESTVENSKIY YU V	73	SCHROEDER B	20	SHEMETOV YE V	64
RUBANOV A S	50	SCHUBERT D	59,71	SHEPELEVICH V V	18,42
RUBANOVA G M	82	SCHUBERT M	58		54,95
RUBENCHIK A M	87	SCHULZ U	10,36	SHERMAN V YE	90
RUBINOV A N	6,17	SCHURIG TH	76	SHERMERGOR T D	52
RUBINOV YU A	68	SCHWARZ J	2,59	SHERSTNEVA T N	62
RUBINSHTEYN B YA	24	SCHWEITZER D	34	SHERSTOBITOV V YE	10
RUDOLPH F	68	SCHWENKE W	94	SHESTOPALOV V P	15
RUDOLPH R	9	SCHWIND A E	62	SHEVEL' S S	34
RUDOLPH W	29	SEIDEL V	81	SHEVERA V S	13
RUDOY I G	11,26	SELIN A A	5	SHEYNIN A B	42
RUDYAVSKAYA I G	63	SELYAVKO L V	53	SHIFRIN K S	43,44,47,93
RUDYY YU B	89	SEMENOV A A	74	SHIFRIN YA S	91
RUECKMANN I	74	SEMENOV A B	40	SHIKANOV A S	87,90
RUEDIGER G	68	SEMENOV A K	57	SHILOV V B	7,27
RUKHADZE A A	30	SEMENOV A S	36	SHILOVA M V	72

SHIRMULIS E	70	SMOLENKOV V F	50	SUEBANOV V L	38
SHKADAREVICH A P	1,29	SMOL'SKIY I L	68	SUKHAEV S A	88
SHKUNOV V V	84,95	SMOL'SKIY O V	51,70,85,86	SUKHODOL'SKIY A T	78
SHLAYN A I	35	SMYDKE J	58	SUKHOPUKOV A P	51
SHLITERIS E P	11	SMYK A F	35	SUEHOTIN S A	20
SHLYUKO V YA	67	SNYKOV V P	48	SUEPROV A V	26
SHMAGIN YU I	81	SOBOL' E N	83	SULALEPIDZE G A	57
SHOKHUDZHAYEV N	5	SOBOLEV B P	1	SULAKSHIN S S	8
SHOPYGIN P P	23	SOBOLEV V A	8	SULAFSHINA O N	79
SHOTOV A P	4,75	SOBOLOV I A	11	SULEYMANOV B T	63
SHRUBOVA E F	4	SOLDATOV V I	36	SUMETSKIY M YU	15
SHTANDEL' S K	95	SOLODKOV A F	3,4,49	SUPHAN K H	81
SHTAN'KO V F	66	SOLODOV A M	79	SURAN V V	55
SHTEYNGART L M	40	SOLOMONOV V I	12	SURIN N M	78
SHUBA I M	56	SOLOSHENKO I I	66	SUROV S P	84
SHUKLIN V S	47	SOLOUKHIN R I	12	SUSCHINSKIY M M	27
SHUMOVSKIY A S	21,22	SOLYANIK N KH	83	SUTUGIN A G	80
SHUMRIKOV V V	83	SOMMER M	58	SVEPELOV B N	3
SHUNYAKOV V T	23	SOMOV S V	19	SVISETIC M	36
SHURALEV S L	7	SORLEI ZS	9	SYCHUGOV V A	79,84,85
SHUVALOV V V	77	SOROKA A M	11,13,26	SYKMAN M I	22
SHUVALOVA T M	67	SOROKIN YU M	25,48	SYETSEV V I	66
SHVARTS K K	54	SOROKINA L A	22	SYETSEV V N	66
SIDORENKO A	18	SOROKO-NOVITSKIY N V	66	SYRUS V	20,60
SIDORENKO V I	22	SOTIN V YE	40	SYSOYEV V K	35
SIDORENKO V M	49	SPIRIDONOV V A	1	SZENTIFMAY ZS	62
SIDOROVA T D	14	SPIRO A G	7,27		
SIDOROVA YE A	69	SPORNIK N M	54	TABARIN V A	8
SIDOROVICH V G	51	SRAPIONOV V A	41	TABUNOV V P	5
SIL'CHENKO A A	64	STABINIS A	29	TAGANOV O K	61
SILENOK A S	89	STAFEYEV A	35	TAGIROV V R	50
SILIN V P	26,90	STANEVICH A YE	63	TALALAYEV M A	17
SIMSA J	40	STANKEVICH YU A	90	TAMBIYEV YU A	5
SINEL'NIKOV V P	9	STANKIEWICZ M	22	TAMM T B	79
SINITSA L N	79	STARODUB V P	11	TANULAYTIS G	70,74
SINITSYN D V	8	STAROSTINA G P	40	TAR J	9
SINKEVICH V I	39	STASEL'KO D I	27	TARABUKHINA I M	47
SIN'KO S V	78	STASHKEVICH A A	29	TARANOV V V	5
SINTSOV V N	51	STASHKEVICH I V	54	TARASENKO V F	25
SINYATYNSKIY A A	4	STAUPENDAHL G	10	TARASOV G G	22
SINYAVSKIY E P	21	STAVROV A A	2,29	TARASOV L V	95
SIROCTINKIN V P	25	STEFANOVICH S YU	25,74	TARASOVA T V	56
SIROTKIN O S	78	STEFFAN J	58	TARKHOV N S	60
SITENKO O G	89	STEMKOVSKIY A I	46	TATARENKOV V M	68,91
SITNIK N A	51	STEPANENKOV I N	63	TATARINOV V I	61
SIZ'MIN A M	30	STEPANOV A A	14	TAVARTKILADZE M A	33
SKLIZKOV G V	88,90	STEPANOV B M	20,66	TELBIZOV P	12
SKOBELKIN O K	33	STEPANOV S I	54	TELEGIN G G	73
SKOBLIN A A	39	STEPANOV V L	33	TEP-FOGOSYAN M A	2
SKOCHILOV A F	62	STEPANOV V M	87	TEUNIN I I	92
SKOCHILOVA I A	62	STEPANOV YE V	75	THILLE G	6,77
SKOPINA V I	4	STEPANOV YU YU	27	THONG DANG DINH	71
SKORIC M M	31	STEPANOVA M I	22	TIBILOV A S	48,68
SKRIFACHEV I V	36	STEPANOVA T S	36	TIGIYANU I M	64
SKRIPKO G A	1,6	STEPURA V I	39	TIKHONCHUK V T	26,90
SKVORTSOV B N	74	STOCK W	14	TIKHONOV V I	55
SLABKO V V	25	STOKIC LJ	31	TIKHONOV YE A	6
SLAVENAS YU YU YU	75	STOKLITSKIY S A	73	TIKHONOVA N S	42
SLEDZIN'SKIY S	88	STOYANOV D	44	TIKUNOV A V	5
SLEDZINSKI S	88	STREL'TSOVA N N	68	TIMOFEYEV F N	4
SLOMINSKIY YU L	1	STRETSKITE G V I	75	TIMOFEYEV V P	25
SMAYEV V P	53	STUCHEBRYUKHOV A A	55	TIMOFEYEV V V	51
SMIRNOV A YE	34	STUPITSKIY YE L	89	TIMOFEYEV YU P	95
SMIRNOV B M	88,94	STYAPANKYAVICHUS V	70	TINPMANN K E	79
SMIRNOV V B	35	SUBASHIYEV V K	22	TINFAVICHYUS E	74
SMIRNOV V L	36	SUBBI YU O	78	TIPCHURIN F A	64
SMIRNOV V N	82	SUBBOTIN F M	52	TISHCHENKO A V	79
SMIRNOV V V	55	SUBBOTIN L K	87	TISHCHENKO A YU	75
SMIRNOV YE A	8	SUCHKOV A F	9	TISHCHENKO V N	10
SMIRNOVA A S	66	SUCHKOV V F	38	TITOV A N	32
SMIRNOVA Z A	19	SUDARKIN A N	84	TKACH YU V	34
SMOLA T	67	SUESSE K E	24	TKACHENKO A P	37

TOKAREV V N	85	VANNIK A M	69	WILLSCH R	65
TOLKACHEV A V	68	VARSHAVSKAYA I G	80	WINKLER R	36
TOLNACHEV A I	1,19	VASILENKO V V	49	WOLF R	81
TOMBAK M A	62	VASILYAUSKAS V	29	WOTTAWA H	81
TOMILIN M G	95	VASIL'YEV A V	68		
TOMN J W	3	VASIL'YEV M A	35	YABLOCHKOV S M	62
TORGASHEV V I	78	VASIL'YEV M G	3,5	YABOROV M T	85
TOROPKIN G N	2,94	VASIL'YEV M V	51	YAGOLA G K	91
TOROSYAN G A	24	VASIL'YEV P P	60	YAKIMOVICH A P	20
TRAVNIKOV V V	73	VASIL'YEV V I	41	YAKOVLEV A G	7
TREBULEVA L YE	89	VASIL'YEVA M A	20,60	YAKOVLEV V A	19,48,68
TRIBEL'SKIY M I	80	VAVILOVA L S	5	YAKOVLEV V P	52
TRIEBEL W	8	VAYCHIKAVSKAS V V	86	YAKOVLEV V YU	66
TRIFONOV A A	34	VAYTKUS YU	74	YAKOVLEV YE B	79
TRIFONOV N YU	79	VELIYEV E I	15	YAKOVLEVA YE N	64
TROFIMOV G S	54	VENDIK O G	95	YAKUBOVA M A	72
TROFIMOV V A	24,51	VERESHCHAGIN S G	63	YAKUBOVICH D S	4
TROFIMOVA V I	4	VERTIY A A	15	YAKUBOVICH S D	3,4,5
TROKHIMCHUK P P	87	VERTUSHKIN V K	17	YAKUSHKIN I G	42
TRUBAYEV V V	82	VETSKO V M	57	YANCHUK V G	2
TRUBNIKOV B N	65	VIGAK V M	19	YANOVSKIY V K	74
TRUFANOV A S	61	VILSER W	34	YANUSHKEVICH V A	87
TRUS'KO V L	39	VINOGRADOV B A	81	YARASHYUNAS K	74
TRUTSCHEL U	41	VINOGRADOVA T A	18	YAREMA D I	69
TKYKHACHEV A V	15	VINOKHOV A YU	27,81	YAREMCHUK V A	64
TSAREGRADSKIY V B	3,16	VINOKUROV S A	29	YAREMENKO YU I	46
TSCHIRNICH J	58	VISHCHAKAS YU	60	YARMOLKEVICH A R	1
TSIDULKO YU A	69	VLAD V I	51	YARTSEV V P	9
TSIMRING SH YE	15	VLADIMIROV F L	41,52	YASHIN V YE	69
TSINTSADZE G A	34	VLADIMIROVA O V	83	YASHUKOV V P	10
TSVYK R SH	43	VODOP'YANOV K L	60	YASINSKIY A V	19
TSYPIN V I	18	VOGEL W	24	YATSENKO E K	63
TUBAYEV V M	66	VOIGT J	14	YEFENDIYEV T SH	17
TUKHVATULIN R SH	20	VOLCHKOV I V	57	YEFIMOV M V	52
TULINOV K V	45,48	VOLKOV G S	86	YEFIMOV O M	84
TULINOV V F	95	VOLKOV V A	69	YEFREMOV N M	12
TUMANOVA L A	60	VOLKOV V N	69	YEGOROV M M	20
TURKINA M YA	56	VOLKOV V YE	34	YEGOROV V K	69
TUROVTSEV A V	38	VOLKOVIISKIY O A	43	YEGOROV YU V	41
TURR I N	25	VOLNISTOVA L P	48	YELFIMOV O V	61
TURSUNOV A T	73	VOLOTSKIY A A	63	YELINSON M I	52
TURSUNOV M A	54	VOROB'YEV N S	5,60	YELISEYEV P G	3
TYAGIN V G	49	VORONIN S P	2	YELIZAROV A I	63
TYATENKOV V K	52	VORONIN YU M	69	YELOVIKOV S S	25
TYCHINSKIY V P	69	VORONKOVA V I	74	YEL'YASHFVICH M A	90
		VORONOV V I	17,84	YELYUTIN F V	26
UDALOV N P	36	VORONOV V N	78	YENAKI N A	21,24
UGLOV A A	81	VORONYUK L V	11	YEPISHIN V A	51
UKHLINOV G A	69	VORYNA E	90	YEREMEYEV YE P	19
UNDRIITOV M I	34	VOYTSEKHOVSKAYA O K	79	YEREMIN V I	46
URBAZAYEV M N	16	VOYTSEKHOVSKIY V N	69	YERMACHENKO V M	24
URIN B M	8	VOYTSEKHOVSKIY V V	35	YERMAKOV D S	62
URSARI V V	64	VRATSKIY V A	79	YERMAKOVA N V	41,63
URVANTSEVA N L	41,63	VVEDENSKIY YU V	20,30	YERMOLAYEV I M	70
URYADOV V N	39	VYACHESLAVOV L N	69	YERMOLAYEV M M	63
USACHEV A L	44,48	VYGOVSKIY O B	90	YERMOLAYEV V L	2
USHAKOV S N	10	VYSIKAYLO F I	13	YEROFEYEV A V	19
USHAKOV V K	58,59	VYSOGORETS M V	61	YEROKHIN A A	90
USHAKOV V P	41			YERSHOV R V	1
USIN V A	91	WABNITZ H	20,71	YESIKOV D A	25
USMANOV T	82	WAGNER M	87	YES'KOV A P	34
USOL'TSEV I F	94	WEBER H J	75	YEVSEYEV A V	57
USOVA V M	68	WEBER T	58	YEVSEYEV I V	24
USPENSKIY D M	81	WEIDAUER R	13	YEVTVSHENKO I N	35
UTYAMYSHEV R I	34	WEIDSUER R	56	YEZHOV S G	28
UVAROV F A	65	WELSCH D G	24	YUKALOV V I	21
UVAROVA T V	1	WENDLER D	15	YUMASHEV K V	7,19
UYMIN A A	13	WESCH W	80	YURCHAK B S	94
UZHON V V	64	WIEDERHOLD G	2,10	YURCHENKO A I	78
		WILHELMI B	29	YURYSHEV N N	14
VAGIN A A	49	WILL I	18	YUSUPOV A K	77
VANEYEV G G	52	WILLE R	75	YUZYUK YU I	78

ZABOLOTSKAYA YE A	27	ZUBIN M A	64
ZAGAYNOV YE F	35	ZUBOV I V	35
ZAGREBIN S B	70	ZUBRILIN N G	13
ZAK YE A	63	ZURABYAN A Z	48
ZAKHARENKOV YU A	87,90	ZUYEV A B	20,30
ZAKHAROV V P	31	ZUYEV A P	70
ZAKHAROV YU N	48	ZUYEV V V	48
ZAKRZEWSKI J	22	ZUYEV V YE	43,91
ZALESSKAYA G A	79	ZYCHKOWSKI K	22
ZALESSKIY V YU	14	ZYUL'KOV V A	24
ZALISHCHEVSKIY A	70		
ZAMFIR C A	41		
ZAMOZHSKIY V D	64		
ZANADVOROV P N	26		
ZAPESOCHNYY I P	11,70		
ZARETSKIY A I	88		
ZARTOV G D	20		
ZASAVITSKIY I I	74,75		
ZASLAVSKIY G M	21		
ZASLAVSKIY V YA	51		
ZASTROGIN YU F	63		
ZATOVSKAYA A A	69		
ZATSARINNNY O I	56		
ZAVOROTNEV YU D	24		
ZAWADZKI Z	67		
ZAYTSEV B I	63		
ZAYTSEV L M	57		
ZAYTSEV V V	81		
ZEGE E P	95		
ZEL'DOVICH B YA	26,48,95		
ZELENSKIY S YE	62		
ZELIKIN N V	85		
ZEMSKIY S V	81		
ZENCHENKO V P	86		
ZEYLIKOVICH I S	54		
ZEYNALOV A K	92		
ZHABOTINSKIY M YE	93		
ZHAK V D	74		
ZHARIKOV YE V	1		
ZHARKOV V P	33		
ZHBANOV A I	34		
ZHDAN A G	61		
ZHDANOVA L A	69		
ZHDANOVICH S N	54		
ZHERNOVOY S A	69		
ZHEVANDROV N D	95		
ZHILENIS A A	84		
ZHIRKO YU I	71		
ZHMAKIN D G	50		
ZHUKAUSKAS A	74		
ZHUKOV G P	44		
ZHURAVLEV V F	48		
ZHURILO T P	14		
ZHURKIN B G	81		
ZHVAVYY S P	50,80		
ZIERMANN R	85		
ZIKRIN B O	55		
ZIL'BERMAN G YE	29		
ZINGER G M	74		
ZINOV'YEV A V	82		
ZMITRENKO N V	88		
ZMIYEVSKOY G N	32		
ZOLIN V F	93		
ZOLOTAREVA L YE	6		
ZOLOTUN N YA	86		
ZOROV N B	57		
ZOZULYA A A	26,90		
ZSCHERPE G	81		
ZSCHOCKE W	2		
ZLBAKOV V G	95		
ZUBAREV I G	27		
ZUBAREV V I	59		

END
DATE
FILMED

4- 88

DTIC